The Network Solution: How Rural District Networks Can Drive Continuous Improvement

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Executive Summary

Rural school districts face unique challenges in procuring funds, recruiting staff, and obtaining high-quality technical assistance. This environment creates problems in identifying high-quality instructional materials and implementing best practices.

A collaborative learning network can address these challenges by providing access to professional development, collaborative time with peer districts, and economies of scale. Pivot Learning designed the Rural Professional Learning Network (RPLN) to address this need and partnered with the El Dorado County Office of Education (EDCOE) in the 2016–2017 school year to pilot the program.

Pivot and EDCOE served as the facilitators of the network by organizing meetings, offering technical assistance, supporting site visits, bringing in external experts, and providing an online collaboration and resource platform. Member districts went through a six-stage design process to address a shared problem of practice. By Spring 2018, districts had completed two cycles of instructional improvement.

Members reported greatly benefitting from the network in two broad areas. First, members appreciated the access to high-quality expertise, professional development, and instructional resources they would not otherwise have had. Second, members found it useful to exchange ideas, collaborate on common issues, and build a shared sense of what a good instructional program looks like.

This trial shows the potential of the RPLN model. Rural networks can cost-effectively provide expertise and build a professional culture from the ground up. State entities and technical assistance providers can support rural County Offices of Education with this model to build greater systemic coherence and improve educational outcomes.

For future networks, we recommend:

- a shared network focus paired with site-specific work;
- multiple, strategic opportunities to learn best practice;
- intentional community and culture building;
- a strong facilitator or hub, at least until the network is fully formed; and
- a shared, data-driven improvement process

Introduction

In 2016, Policy Analysis for California Education (PACE) and Pivot Learning, an education nonprofit based in Oakland, California, released *Surprising Strengths and Substantial Needs: Rural District Implementation of Common Core State Standards* (Timar & Carter, 2017). The paper discusses the challenges faced by California rural and small school districts as they implemented new state education policies including the Common Core State Standards (California Standards). The authors found that these rural, isolated, and small districts had difficulty building the capacity of their educators to effectively implement the new standards. To respond to these challenges, Pivot Learning and the El Dorado County Office of Education launched the Rural Professional Learning Network (RPLN), a group of 12 districts working together to solve shared problems of practice in standards implementation. In this paper, we discuss the design and implementation of the rural district learning network model, its progress, and implications for state and national rural education policy.

Our methodology included (a) focus groups of network participants; (b) individual interviews with network experts, Pivot staff, El Dorado County leadership and staff, and district- and school-based network members; (c) survey data from RPLN in-person and virtual meetings; and (d) student- and teacher-level surveys from districts and schools engaged in the network. In addition, we reviewed the literature on network development and implementation.

The Rural District and School Context

Across the nation, rural, isolated, and small school districts suffer from a range of resource constraints including funding, access to human capital, and the availability of high-quality technical assistance. Indeed, many rural districts have difficulty recruiting and retaining staff.[1] In contrast, the 12 districts we studied had stable leadership and teaching staffs. Approximately 50 percent of teachers and school leaders had been in their roles for more than six years. In addition, while many rural districts across the nation face technology challenges in areas such as Internet access and bandwidth, these districts reported having the necessary technology to support standards implementation, specifically online assessment and professional development. The vast majority of the districts used technology for continuous/blended learning, instructional support for CCSS, support for special needs populations, and assessment. This reflects statewide multi-billion-dollar investments in building and maintaining California's educational technology infrastructure.

[1] Human capital challenges such as attracting high-quality teaching staff and preventing excessive teacher and leader turnover often result from frustration with the limitations of teaching in or leading a rural school or district; lack of support from school, district, and county leaders; competitive financial opportunities in suburban/urban areas; and other factors such as a dearth of resources in rural areas (Hassel & Dean, 2015; Kamrath & Brunner, 2014; Dixon, 2012).

On the other hand, these districts were challenged to effectively and efficiently identify high-quality instructional materials and assessments. They did not have the resources to fund instructional coaches found in many urban and suburban districts and had limited access to high-quality professional development supports. These issues contributed to a high degree of variation in the depth of standards implementation at the school and classroom levels. For support, districts turned to their County Offices of Education (COEs) and the California State Department of Education (CDE). However, many rural and isolated COEs suffered from the same resource constraints as their districts.

The limited capacity of both COEs and the CDE to provide ongoing instructional support to school districts is attributable to the changing roles of these institutions. Over the past four decades, the CDE's role has changed, diminishing its capacity to support school districts in developing high-quality instructional systems. During the first half of the 20th century, the CDE was organized to provide instructional support to districts, especially rural ones. In the 1970s, the institutional role of the CDE shifted to compliance monitoring, and the agency moved from providing direct support for instructional improvement to a greater reliance on initiating change through regulatory development. Districts, schools, and teachers were given the responsibility for implementing state mandated programs and any resulting coherence in teaching and learning generally derived from the implementation of a common curriculum. Similarly, many COEs shifted away from a focus on instructional support to other niches including Regional Occupation Centers and Programs, fiscal oversight, juvenile court schools, and joint partnership programs with districts for special education services.

This lack of institutional support and resources for instruction often has the greatest impact on small, rural districts. While these districts are as committed as more urbanized districts to implementing the California Standards, the Local Control Funding Formula (LCFF) and other federal, state, or local initiatives, their teachers and support staff (when there were any) expressed frustration at their lack of resources and the limited support available to them to respond affirmatively to these education policy shifts.

The Rural Network Solution

A collaborative learning network can address these challenges by providing access to professional development, technical assistance, external expertise, collaborative time with peer districts and the economies of scale of larger districts. In 2014, UC Davis' Center for Applied Policy in Education identified 61 collaborative K–12 networks in California (Hagood, 2014). These networks have allowed participants to access resources and best practices across schools and districts with the goal of collectively improving student outcomes. Nicholas Morgan, an expert in education networks and rural education who has served as a consultant for the RPLN, has highlighted professional development as a key need for rural schools, especially those in remote, sparsely populated areas. But professional development is expensive, and rural and

small districts can rarely afford to pay for expert consultants. In collaborative networks, districts and schools can access resources that previously may have been cost prohibitive and provide educators with the opportunity to share resources as they collectively address a common problem of practice.

Project Background

The Rural Professional Learning Network (RPLN) began in 2015 with generous support and grant funding from the S. H. Cowell Foundation. Pivot's goal was to build a network of rural school districts to address shared problems of practice using a blended model of in-person and virtual meetings. The initial prototype of the RPLN had limited success in part because of the lack of a structured continuous improvement process and local anchor partner, so Pivot redesigned and relaunched the network in 2016–2017 in collaboration with El Dorado County Office of Education.

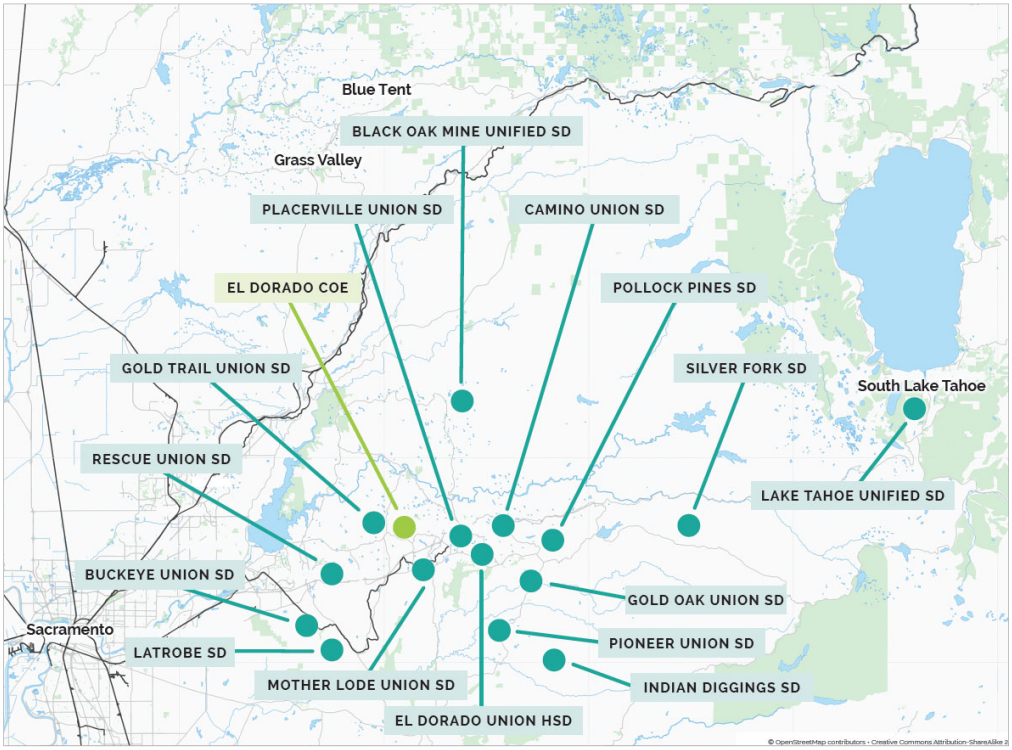
El Dorado County is located in Northern California, east of Sacramento. It comprises fifteen school districts, which serve nearly 27,000 students. The county stretches across a vast geographic region, a total area of 1,700 square miles, with one of its smallest school districts serving only eight students. Nearly all of the districts are K–8 districts that feed into one high school district, El Dorado High School Union (see the map in Figure 1 and the enrollment distribution in Table 1 for the network's member districts.). The county is also its own Special Education Learning Plan Area (SELPA) and supports several charter schools, community day schools, and juvenile detention centers.

Table 1. The network's member districts and enrollment distribution

District	Grade Range	Enrollment	Race/Ethnicity %		Classification %	
			Hispanic	White	ELL	FRPM
Buckeye Union	K–8	5216	14	69	4	14
Camino Union	K–8	503	31	58	19	30
EDUHSD	9–12	6649	15	72	1	18
EDCOE	K–12	1029	21	66	4	41
Gold Oak Union	K–8	476	10	85	2	34
Gold Trail Union	K–8	685	11	83	3	28
Indian Diggings SD	K–7	17	18	71	0	Redacted[2]
Mother Lode Union	K–8	1085	34	58	16	56
Pioneer Union	K–8	303	19	66	5	60
Placerville Union	K–8	1293	29	63	15	52
Pollock Pines SD	K–8	687	16	76	3	50
Rescue Union	K–8	3720	16	72	5	14
Silver Fork SD	K–7	11	9	91	0	Redacted[2]

[2] Sample sizes were too small for the California Department of Education to report them publicly.

Figure 1. El Dorado County Office of Education and its 15 districts



Rural Network Design

The goal of our collective work was to develop and test a network approach for rural districts and schools that struggle with limited resources and capacity in order to decrease isolation and promote independence (Flanigan, 2011). The current version of the RPLN incorporated important lessons from limited engagement with districts in our first iteration of a rural district network, including the need for a local anchor partner and the application of a highly structured continuous improvement approach.

The key design elements of this approach are:

- A ***facilitator or hub*** for districts or schools until the model is self-sustaining. For RPLN, Pivot Learning serves as the facilitator with the goal of training El Dorado County Office of Education to serve in that role. The ultimate objective is for participants to take ownership of the model and sustain it themselves, even without the County Office support.
- A rigorous (and sometimes lengthy) ***pre-work phase*** to ensure that members are ready to engage in the process of identifying and testing solutions to the shared problem of practice. Pre-work steps include:
    - **Identifying sponsors for each network member** (district and/or school). The role of sponsor is key to the long-term success of the work. They are responsible for providing resources, advocating for and committing to the network, and removing

barriers. In most cases, sponsors are superintendents or other senior district or school leaders.

- **Establishing project drivers for each network member**. The role of the driver is key to getting work done. They are good project managers and have influence in the district or school. In most cases, the drivers are assistant superintendents, directors, managers at the central office, assistant principals, or other support staff at school sites.
- **Convening diverse design teams**. These teams must be (a) representative of all stakeholder groups impacted by the problem of practice; (b) invested in solving the problem; (c) fully engaged, as a working member of the design team; and (d) fully valued, with an equal voice at the table, regardless of their role in the district and/or school.
- **On-boarding all participants into the work**. Participants must understand the network model and the user-centered design process for continuous improvement.
- **Reviewing common data among participants to identify a shared problem of practice**. Note that the problem of practice is selected using a shared set of criteria. It is important that members develop the shared problem of practice together rather than being assigned one. This leads to deeper understanding and ownership of the problem, which in turn creates a sense of urgency and collective action among participants. All of this contributes to sustaining the network and increasing impact.[3]
- **Developing longer term impact and implementation goals for the work**. Once the problem of practice is developed, each network member (district and school) develops goals for the work. These goals should be SMART—specific, measurable, attainable, realistic, and timely. Each network member must develop project plans aligned to the design process and in support of reaching set goals.[4,5]

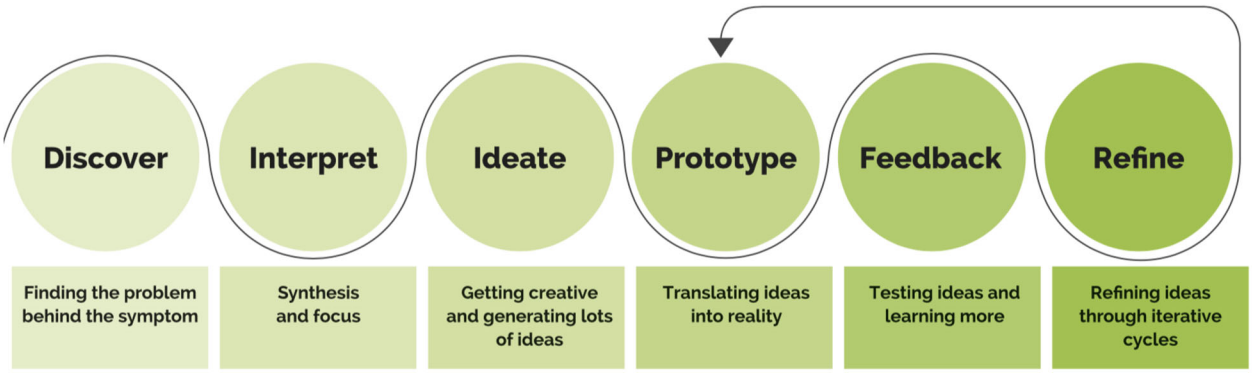
Following pre-work, Pivot launches a shared design and improvement process for, first, understanding the specific problem of practice within each district and school context and, second, identifying and testing potential solutions. A shared process allows for districts and schools in a network to learn from each other's strengths and needs using a common vocabulary and a common timeline. Additionally, a shared process allows the facilitator and network members to better manage their work by meeting specific benchmarks and ensuring that the project is making progress and achieving goals.

[3] It is possible to have a pre-selected problem of practice and still have a productive network. In this case, the work of recruitment is very important, as is the process for selecting network members who are fully committed to the problem that has been selected. For the network member to commit, it will likely require that they better understand the importance of the problem, including having a good grasp of their current need and desired future state. It will also likely require ongoing reinstatement of commitment from network partners to the identified problem of practice, and possible off-boarding if necessary.

[4] As we go through the process, it may be the case that districts and schools need to modify their goals, indicators, or measures, as they learn more.

[5] We encourage all goals and plans developed through the network to be aligned to and integrated with existing site goals and plans.

Figure 2. Pivot's design process



Note: We use the design process above to drive improvement in our networks. Our approach is inspired by experts in the field of design, like IDEO and the Henry Ford Learning Institute.

The process is data-driven from the start and consists of six major phases of work. In *discover* (phase 1) and *interpret* (phase 2), districts and schools gather and analyze data to better understand the problem at their own sites. They go on to collect best practice resources and information from experts to inform the development of potential solutions. Then, network members move to *ideate* (phase 3) and use clear criteria to identify research-based solutions that address the problem in their district or school context. Finally, network members conduct cycles of improvement in which they test the solution (or *prototype*) and modify their approach based on progress made against leading indicators over the determined time.[6]

Pivot Learning facilitates the network with the expectation that members will learn and eventually "own" the design process, both as individual members and as a collective group. The design approach is based on the belief that those who are closest to the problem are also closest to the solutions. Because of the multiple demands on the time of network members, Pivot provides the following supports:

- **Bi-monthly network meetings**. These meetings are an opportunity for network members to share and learn best practices, update and provide feedback on progress, and reflect on individual and collective action and next steps.
- **In-person and/or virtual meetings with individual districts and/or school sites, in between in-person network meetings**. This ensures that work continues at district and school sites as a part of their regular work, which is crucial for discovery and prototyping.

[6] Note that we commit considerable time and effort preparing network members to test their solution. This includes identifying the data that should be collected to best demonstrate whether a potential solution is working (or not working) and how the solution should be modified. This also includes identifying how they will measure or collect the data. In many cases, the data will not be readily available, because they could be either new data or data that haven't been collected before.

- **Differentiated technical assistance to individual districts and/or schools**. This is identified through an ongoing assessment of network member capacity by facilitators.
- **Site visits so that network members can visit other districts and/or schools to observe the prototype being tested, to give feedback, and to learn to inform their own prototypes**. These site visits are also a way for schools and districts to engage with other network members around good teaching and learning generally. This is especially important for rural schools and districts that may have no other colleagues who teach similar subjects and grades or who hold similar roles at their own sites.
- **Access to an online collaboration, learning, and resource platform for all network members**. This online platform allows for: (a) asynchronous collaboration among network members and facilitators and (b) access to a high-quality library of research and other resources, including resources shared by other members of the network.
- **Access to a pool of external experts, aligned to and in support of problems of practice**. The experts serve as resources to network members during the in-person meetings, during network member check-ins, and through other learning opportunities, such as webinars.
- **Free and user-friendly technology to facilitate many of the supports above**. This includes online sharing and learning, virtual meetings with video and screen sharing, webinars that are both interactive and easy to view later, data collection and analysis, and calendaring of network meetings and check-ins.
- **Intentional community-building that fosters mutual accountability and collegiality among network members, building on a collectively developed and shared set of core values**. Facilitators are required to ensure that the work is meaningful and that network members are regularly reaffirming their shared vision, mission, and goals. It includes continued recognition of the hard work of network members, including official celebration of progress made.

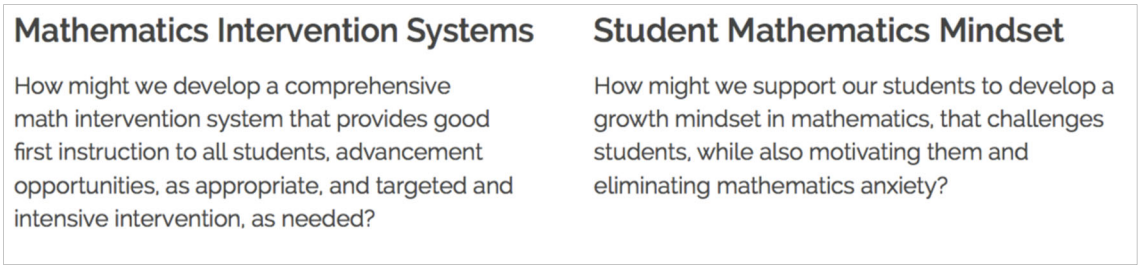
In addition to the components identified above, Pivot consistently works to ensure that the networks can be sustained. For this to happen, facilitators must involve network members in the development of the network, so that they are collectively responsible for and motivated by the work. The goal is for the group of network members to become the network hub, maintaining and growing a dynamic, productive, and impactful community. Though Pivot functions as the initial hub to ensure long-term sustainability and impact, the network facilitators focus on capacity-building in order to gradually release responsibility for managing the network to its members.

RPLN Implementation

According to El Dorado County Office of Education Superintendent Ed Manansala, the County Office's goal in joining the network was to build its capacity to systematically support its local districts in improving teaching and learning, rather than

providing unaligned idiosyncratic support. Pivot has served as the organizational hub for the collaborative network while the County Office works to build a systematic, coherent system of ongoing support to all districts. In the coming year, the County Office will co-facilitate meetings and eventually serve as the hub. Member districts have formed design teams with sponsors, drivers, and design team members representing diverse stakeholders in their school systems including superintendents, assistant superintendents, central office staff, principals and assistant principals, school site support staff, and teachers. In the spring of 2017, network members identified two shared problems of practice (see Figure 3) after several sessions of collaboratively collecting and analyzing their data.

Figure 3. Two shared problem of practice statements



After the problem of practice statements were drafted, network members selected the problem that was most relevant to their local context. They then developed customized visions and longer term goals that would demonstrate their impact if they successfully addressed the problem of practice.

During the summer and fall of 2017, each district engaged in the discover, interpret, and ideate phases of the design process. During discovery, districts collected student and teacher feedback through surveys and interviews, student achievement data through assessments and grades, student attendance and behavior data, and data around teacher practice through observations. This data collection helped districts better understand their current context relative to their problem of practice. Additionally, as part of the discovery phase, Pivot developed a resource library on the Collaboration in Common platform and a literature review aligned to the problem of practice. Pivot also brought in external experts to speak to the problems of practice. Through these external resources, districts were able to better understand their gaps and develop prototype solutions for them. The experts included:

- Cecilio Dimas, Partner and Director of Strategy, Silicon Valley Math Initiative;
- David Foster, Founder and Executive Director, Silicon Valley Math Initiative;
- Dean Ballard, Director of Mathematics, Consortium on Reaching Excellence; and
- Mark Goldstein, Vice President, Curriculum and Instruction, Center for Math and Teaching.

What is Collaboration in Common?

Collaboration in Common (CiC) is an online platform that seeks to empower educators by providing access to professional learning resources. These professional learning resources include digital resources, best practices, and current research. CiC also acts as the primary platform for network members to connect with one another and provides network meeting materials, asynchronous learning opportunities, and intra-district conversations related to the Problem of Practice. CiC is supported by the California Department of Education.

In December 2017, districts used selection criteria to identify the right prototype to test in their districts and schools. By January, they had built their prototypes and developed a plan for testing it in their schools and classrooms, including who would be involved and when and how they would test. Additionally, each district identified a short list of indicators that they could measure to determine prototype effectiveness and use to improve their prototype after each cycle of testing.

Figure 4. Example prototypes and indicators for testing prototypes

District Team	Problem of Practice	Prototype	Indicator and Measure	Indicator and Measure
Gold Oak Union	Intervention	Intervention Push-In	Student Response on Surveys	Achievement on Benchmark Assessments
Mother Lode	Mindset	Professional Development	Grades	Student Response on Surveys

Mother Lode School District conducted and analyzed growth mindset surveys for students in Grade 3 and Grades 5–8 to serve as baseline data. The district provided professional development for staff and then implemented a local benchmark error analysis. This change regrouped students by need, redesigned classrooms to best meet students' need to build confidence, and fostered a growth mindset in students and staff. The district welcomed network members from across the county to provide feedback on current growth mindset efforts and to reflect on progress made thus far.

By Spring 2018, districts completed two cycles of prototype testing and worked with each other to explain, assess, and improve their initial prototype. As one network member stated, "I appreciate sharing our prototype with… others… and hearing what they are doing. We had thoughtful discussions and offered each other new ideas that support this process."

Progress Assessment

This assessment is formative, meant to gauge and better understand the process of creating a collaborative network to support rural schools in the process of continuous improvement in standards implementation. Based on evaluation feedback and network participant interviews, members have gained significant benefits from the network development and implementation process. Kevin Monsma, Deputy Superintendent of El Dorado COE, stated:

> Initially, the change in standards led to an intensive discussion between the high school and feeder districts. Components of that discussion were not resolved. However, now that we have the network, we have the openness to discuss what used to be uncomfortable and contentious issues. In general, we are looking at what we can improve together.

Another network member reinforced the idea of having the right conversations across the community:

> [I have the opportunity to engage with]… key players in my district as well as key players from other districts. I began to see that other districts are dealing with the same, or very similar, problems, no matter what their size. We have good discussions about what is working and what is not. It makes people feel comfortable about discussing their own problems. Having everyone—teachers, administrators, counselors, special education teachers—at the table has been great.

Another network participant focused specifically on the power of community thinking and innovation: “It is really helpful when you have multiple participants as you then can generate more ideas.”

Crucially, the capacity to have these hard conversations and move the work forward is a result of a collaborative process to develop shared values and norms across the entire learning community. Another network member noted that even though districts had developed collaborative relationships over the years, those relationships tended to be loose and unstructured: “RPLN has helped in expanding existing networks and bringing teachers into it.” Speaking to the rural environment specifically, he stated, “In rural districts, there are so few teachers to pull from. If you pull one or two, you are pulling from the whole system. The meetings so far have been productive and we are not just spinning our wheels.” With this involvement from teachers also come investment, motivation, and momentum to move things forward at the classroom level.

Beyond the benefit of creating a strong learning community, participants also expressed their appreciation for the RPLN structure. One network member noted, “Within districts, they [the facilitators] provide specific collaboration time, giving us calendar time that we need to work through some of the processes.” Without that, he argued, the collaboration could not happen. Another interviewee noted, “The cohort meetings on a regular basis have been really helpful. Having a specific subject is also very important.”

Another participant seconded the value of having a sharper focus and noted that the network provided opportunities to focus not only on short-term problems but also on the long term—what is good math instruction, how to develop the kinds of practices and protocols that benefit all students, especially low-income students. According to her, one of the major difficulties with math instruction is to develop a common set of goals and professional norms. “Everyone sees math instruction through a different lens.” She also believed that the network was very helpful in developing participant depth-of-knowledge levels, starting with procedures and progressing to subsequent levels of understanding the problem, thereby allowing districts and individual network members to create their own learning experiences. Figure 5 shows the average RPLN meeting feedback from participants.

Figure 5. Average RPLN meeting feedback

In addition to praising the structure, several network members also referenced the exposure to best practice research and external experts. One participant noted the difficulty for rural districts in getting access to high-quality professional development. Her district, similar to most other small, rural districts, lacked the funding to bring in the expertise that she was able to obtain for the larger suburban district where she worked before. “Out here,” she said, “we don’t have that [professional development and external expertise]. It’s frustrating. We have a high level of need, especially in math. We are unable to access support. When we heard about RPLN, we saw this as an opportunity to merge resources with other small districts and work together.”

Many of the network members spoke directly to the impact on the classroom and students. One interviewee mentioned that one of the most important outcomes of RPLN thus far has been to develop a shared sense of a good instructional program:

> We are looking at interventions in math instruction to help us improve our practice. One of the critical factors that we have identified is consistency across classrooms in math instruction to make certain that all students are receiving the same quality and depth of instruction. And we want to make certain that there is consistency in teacher expectations. At the present, expectations are too low and need to be pushed to a higher level.

Without the RPLN community and structure, they did not think that they could have had this positive impact on teaching and learning.

In addition to improvements to teaching and learning, interviewees also described the network's impact on equity in and across districts and noted how the structure allowed them to establish a common equity agenda. As one high school respondent noted,

> This kind of effort requires building philosophical consensus and building relationships. In two of our four Title I schools, where we shared the data, the math teachers stated that they could not accept those outcomes, and that we had to do something different, something better. Teachers need to go back to their departments and advocate for change.

All the individuals interviewed believed that having a strong facilitator or hub for the network was essential to its success. Network members also noted the value in a facilitator guiding a shared process for solving the problems and the importance of the facilitator bringing in resources and outside experts to inform solutions. Additionally, they shared the importance of having a facilitator to organize productive meetings and ensure that the work moved forward between meetings through check-ins and other structures.

They also noted the importance of the COE's collaboration with Pivot. As one stakeholder observed, "The COE plays a vital role in knowing the needs of our districts. They create the link for us to have real conversations about instructional improvement." Most recipients expressed a strong interest and need for a system of ongoing support, and they saw the COE as well positioned to take on that long-term responsibility.

While the response to RPLN has been positive among districts and the COE, challenges remain, including time and money. The geographic dispersion of rural districts makes it difficult and expensive for people to meet. If participants have to drive long distances to attend workshops, they will be away from their schools for an entire day. In small, rural areas, districts

have difficulty in finding qualified substitute teachers. Even if substitutes were available, some districts might not be able to afford them. RPLN participants also noted the initial reluctance of districts to join the network. Some had previous experience with other networks and had found them to be unsatisfactory. Their reluctance was overcome, however, once they attended initial meetings, experienced success in the process, began to see the potential of the network, and grew to believe that it was worth their time. Among interviewees, the most significant differences in opinion were around the use of the Collaboration in Common platform. Some saw value in asynchronous collaboration between meetings and using the tool to gain access to online resources, while others did not see immediate benefits.

Changing cultures and embedded practices takes time, attention, relationships, and energy. As Michael Fullan argues, effective education systems are driven by a clear moral imperative that every child deserves a high-quality education (Fullan, Adams, & Quinn, 2013). Put another way, practitioners and policymakers should ask: "What does it take to ensure that every student in California, regardless of where that student lives, receives the same quality education?" Professional learning networks such as RPLN offer one potential solution.

Lessons Learned

While Pivot currently facilitates this network, a question that this paper seeks to answer is whether County Offices or other organizing entities might be able to assume that role. This is particularly timely as the state works to establish a system of continuous improvement based on data from the State Performance Dashboard. At present, some technical assistance providers may be supporting district and school networks, but most organizations, such as County Offices, do not have the resources to provide the organizational support and guidance necessary to create and sustain networks.

The possibility of increased resources to support County Offices as they take a more direct role in providing districts with support for continuous improvement is a positive step. However, we should expect to see considerable variation among County Offices and other organizations in their respective capacity to provide support to networks. This variation leads to a lack of predictability of outcomes for networks, districts, and schools. With less predictability, what types of support will the state provide County Offices or other network facilitators and hubs? To run an effective network, organizations that have not run networks previously need significant resources, direct modeling, and guidance to begin managing their own systems.

Finally, the vision for a statewide system of support is still unclear. The California Collaborative for Educational Excellence (CCEE) already runs networks. How does the work of the CCEE fit with the support provided through the CDE and County Offices? How does it all come together into one coherent system of support for districts and schools? Based on the results from the RPLN, we offer the following lessons learned.

Lesson Learned 1: Participants can establish a shared focus, but their ongoing engagement is dependent on site-specific work with impact on student outcomes.

Members of the RPLN are focused and motivated by the impact of their work on student outcomes. To achieve impact, a network needs consensus around a common equity agenda, a common mission, vision, and values, and a shared problem of practice aligned to that agenda, mission, vision, and values. The problem of practice and the overall intended impact are determined through deep data analysis and serve as a primary driver of the work of the network from start to finish. *What is the problem that the network will collectively address? What is the impact they aim to achieve?* Although there is a common equity agenda, shared mission, vision, values, and a shared problem of practice (as well as a shared process for solving the problem), each district or school team develops longer term impact goals and leading indicators that are aligned to the commonalities but specific to their context. They also develop solutions that meet their specific needs using best practices.

Lesson Learned 2: Intentional community- and culture-building.

To do this work, building intentional community and culture is essential. Each district or school team needs to be representative of all levels of the system—central office leadership and staff, principals, teachers, and school support staff. The size of the team depends on the size of the district and/or school. Even in the smallest districts and/or schools, various perspectives must be included to build trust and relationships and to ensure that these perspectives are included in developed solutions. Also important is the role of the leader or sponsor, who should advocate, remove barriers, and set parameters without giving mandates. The team must have a project driver who can ensure that the work moves forward. The network should also build intentional community and culture across the network. Especially in rural and small districts or schools where educators may face isolation, long distances, and a lack of personnel, the time they do have together should be of high value. In addition to in-person meetings, meaningful virtual engagement is especially helpful for rural districts and/or schools where regular travel for staff may be an overwhelming burden. Asynchronous engagement opportunities should be provided to engage in the work on their own schedule.

Lesson Learned 3: A shared, data-driven improvement process.

In order to be successful, the districts in the network must effectively use a common, data-driven improvement process for solving the shared problem of practice. Importantly, the improvement process starts with a rigorous pre-work phase. During that pre-work phase, network teams are selected, the problem of practice is identified through a dive into shared data, teams are trained on the improvement process, a timeline is set, teams are given tools to collaborate, and each network team sets impact goals. A productive pre-work phase is essential because it serves as a foundation for the rest of the work. Once pre-work wraps up, the teams

are ready to dive into the process in full—gathering and analyzing data to understand their problem in their context, thinking of possible solutions based on best practice, and developing prototypes to iteratively test and improve in order to address the problem. While the facilitator guides the process, the network teams drive their work. That said, this level of data collection and analysis often exceeds the existing capacity of network members, so it is also important that facilitators provide scaffolding for members to effectively meet the necessary outcomes of each phase of the work.

Lesson Learned 4: Multiple, strategic opportunities to learn best practices.

Developing a deep understanding of best practice is the only way for districts and/or schools to make informed decisions through the design process. It is important that multiple strategies are used to expose network members to these best practices, such as receiving advice from external experts, reading research, utilizing best practice toolkits, and learning from collaboration with other districts and/or schools. External experts must provide support that aligns specifically to the problem of practice and shows an understanding of district-specific context. Local experts or network members who present their progress to the network should be carefully selected based on the richness of their work, their strengths, and crucially, their lessons learned. Additionally, network members should learn from districts and/or schools through site visits. These site visits should be aligned to the problem of practice and the prototype being tested to solve the problem. Host sites should be engaged in deep work, with both room for improvement and strengths that they are open to sharing and discussing productively. The resource library should also be well aligned to the problem of practice, based in the most rigorous, relevant, and timely research, and should be both virtual and supportive of asynchronous engagement. Multiple learning modalities should be employed, which reflect different adult learning needs. It is also important that virtual and in-person opportunities and synchronous and asynchronous engagement are leveraged. Learning should be both individual and collaborative, on network teams and across the network. The right technology is essential—free or inexpensive, user-friendly, and supportive of both sharing and discussion.

Lesson Learned 5: A strong facilitator or hub, at least until the network is fully formed.

As discussed previously, a successful network starts with a strong facilitator or hub, which is responsible for a wide range of administrative tasks: developing content, facilitating network meetings and site visits, building a pool of external experts, creating a resource library, and guiding districts and schools through the design process. Because districts and schools are usually new to networks and the design process, it is essential to have “boots on the ground” to build intentional community and culture, nurture trust and relationships within and across the network, and give the network, its districts, and its schools differentiated support. Once the network is up and running, it is then important that the facilitator starts to teach others the role of the facilitator, letting go of responsibilities through a gradual release model. Ideally, a local

organization like a County Office, university, or one of the districts will eventually take on that role.

Conclusion

A collaborative district network model is the antithesis of centralized, top-down school improvement efforts. State policymakers should take a long view of how to realign and build a system of support, keeping in mind what we are asking of our districts and schools and the support they need to respond to the significant policy changes over the past ten years. Our collective goal as state entities and technical assistance providers should be building greater systemic coherence, which leads to more predictable education outcomes for districts, schools, and our students. The implementation of the RPLN offers important lessons to policymakers and others using a network model to drive continuous improvement.

Author Biographies

Thomas Timar's areas of expertise include education finance, policy, and governance. Prior to his retirement, he served as Director of the UC Davis Center for Applied Policy in Education (CAP-Ed) and a member of the steering committee for PACE.

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Nicodemus Ford is the Senior Program Manager for the Rural Professional Learning and Math Placement Network with Pivot Learning. Nicodemus has held positions with the Region IX Equity Assistance Center at WestEd, advising the California Department of Education, and with the Bill and Melinda Gates Foundation, Alternative High School Initiative. Nicodemus earned his undergraduate degree in History at Wayne State University and completed his Master's in Education at Marygrove College in Detroit, Michigan.

References

Dixon, T. M. (2012). *An investigation of factors related to the retention of teachers in rural middle schools.* ProQuest LLC, Ed.D. Dissertation, Walden University.

Flanigan, R. L. (2011). Professional learning networks taking off. *Education Week*. Retrieved from www.edweek.org/ew/articles/2011/10/26/09edtechnetwork.h31.html

Fullan, M., Adams, E., & Quinn, J. (2013). *Whole systems change framework*. Workshop materials for the System Transformation Collaborative. Center for Applied Policy in Education (CAP-Ed), School of Education, UC Davis.

Hagood, D. (2014). *California K–12 Collaborative Network Inventory.* Center for Applied Policy in Education, School of Education, UC Davis.

Hassel, B. C., & Dean, S. (2015). *Technology and rural education*. Rural Opportunities Consortium of Idaho (ROCI). Retrieved from http://www.rociidaho.org/wp-content/uploads/2015/03/ROCI_2015_RuralTech_Final.pdf

Kamrath, B., & Brunner, C. C. (2014). Blind spots: Small rural communities and high turnover in the superintendency. *Journal of School Leadership, 24*, N3, 424–451.

Timar, T., & Carter, A. (2017) *Surprising Strengths and Substantial Needs: Rural District Implementation of Common Core State Standards*. Policy Analysis for California Education (PACE). Retrieved from www.edpolicyinca.org/publications/surprising-strengths-and-substantial-needs-rural-district-implementation-common-core-state-standards

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