Teacher Social Capital and Educational Improvement

Recent Knowles staff blogs describe how supporting Fellows in building professional community forms a critical foundation for improving their teaching practice. While we regularly observe the impact of the Fellowship on Fellows interactions' with each other, we also are beginning to understand more about how the Fellowship affects their relationships with school colleagues and the critical importance of these relationships to educational improvement within and beyond Fellows' classrooms. Building these relationships is not always easy given constraints such as the structure of the school day and isolated classrooms that keep teachers apart. Yet, within their varied contexts, many Fellows find productive ways to connect with colleagues about teaching and learning.

The strength and reach of the relationships teachers build within a school community are important because, through these relationships, teachers are able to access resources such as expertise or materials which allow them to improve their teaching. These resources, available through social interaction with colleagues, are known as teacher *social capital* (Coburn and Russell, 2005, p. 205). When people talk about improving education they often point to the need for tighter (or looser) teacher selection requirements, more or different teacher preparation, advanced degrees, additional credentials, etc. These are *human capital* factors—skills, knowledge or experience that belong to individuals. Human capital is important—teachers certainly need to know their subject matter and how to connect students and subject matter. However, there is an increasing body of evidence that human capital is not sufficient for improving educational outcomes; in fact, recent research has found social capital to be a better predictor of student achievement than the characteristics and behaviors of individuals, i.e., human capital (Pil & Leana, 2009; Daly, Moolenar, Der-Martirosian & Liou, 2014). When Fellows establish collaborative practices in their schools, they influence the development of social capital.

To understand more about how Fellows build social capital, the Knowles Teacher Initiative commissioned a study: *How Teachers Develop Social Capital*. The researchers interviewed eight Fellows, some of their colleagues and at least one administrator from each of their schools to investigate how teachers develop and use social capital. The study found that the Knowles Teaching Fellowship program models strategies and provides resources that help Fellows develop a vision of collaboration that they are motivated to replicate in their own schools.

In this blog post we focus on how the examples in the report lead us to better understand how teachers can build social capital by strengthening collaboration among their colleagues. We focus on one dimension of social capital in particular: the structure of social networks, which describes the “specific quality and configuration of ties between individuals” (Coburn & Russell, 2005, pp 206-207), which has two parts: the strength and span of ties within a network. The case studies illustrate how Fellows are increasing both the strength and span of their professional relationships across a range of school contexts.

One of the patterns that we saw in the data that did not get highlighted in the report was how Fellows used different leverage points to build social capital dependent on their contexts. These approaches fell into two basic categories: schools with collaborative structures in place, such as common planning time, professional learning communities, or team teaching; and schools where such collaborative structures were lacking. We also saw evidence in the examples that schools undergoing change and evolution of their curriculum present an additional leverage point independent of collaborative structure.

Schools with Less Collaboration Between Teachers

Fellows in schools where collaboration was less developed (and therefore network ties were neither wide nor strong) created their own openings to facilitate interactions and build relationships between colleagues. To do this, Fellows often drew on what they learned through the Fellowship to work through existing barriers and develop new collaborative practices and structures.

A particularly important strategy was leveraging small openings in order to foster deeper collaborations between relatively few colleagues, and then expanding their reach, with the goal of ultimately impacting a wider audience. For example, a large, public high school described in the report as “resistant to change,” had a stated policy of collaboratively-taught courses, although what this generally meant in practice was simply administering common assessments. A Senior Fellow teaching at that school found an ally in another teacher and the two of them developed a collaboratively-taught AP Environmental Studies course which included co-planning all their lessons and sharing observations and data about students’ progress. In these efforts, the Fellow explained that she was trying to replicate some of the collaborative culture and practices that she experienced at KSTF. The success of the intensive relationship between the Senior Fellow and

her partner gained notice across the department, expanding teachers' views of collaboration and prompting others to adopt their model. Now teachers across the department regularly engage in practices such as observing each other's classrooms and sharing course curriculum.

This example shows how a teacher's initial efforts at increasing the *strength* of one network tie when collaborating closely with another teacher ultimately increased the *span* of the network ties in her department.

Schools with More Collaboration Between Teachers

Fellows in schools with more collaborative contexts had the advantage of established structures that facilitated the collegial relationships necessary for building social capital, resulting in network ties that are wide in scope. They were therefore able to increase the strength of network ties by focusing the collaborative activities already in place on important problems of practice.

One example from the study is a Fellow or Senior Fellow teaching biology at a public school (with the motto "student success is achieved through a collaborative community effort") which the report described as high-performing. This Fellow transformed her departmental professional learning community (PLC) from a top-down vehicle for professional development with a designated "leader" to a community where teachers collaboratively share expertise to build knowledge about teaching and learning. Central to her effort was the use of norms—agreed upon practices to guide the work of the PLC—drawn from her experiences with norms within her Fellowship cohort.

This Fellow's approach was to take an existing collaborative practice at her school—the use of departmental PLCs—and make it more egalitarian, collaborative and focused. As with the example above of leveraging a collaboratively taught course, her efforts ultimately increased social capital in her school. However in this case, the teacher increased the strength of the ties within the span of connections that already existed in the network, i.e., departmental PLCs.

Schools With an Evolving Curriculum

Fellows in schools working on curriculum reform found a built-in opportunity for increasing social capital because it provided a focus for collaboration within or

across departments. To illustrate, one Senior Fellow in the study who works at an urban charter school the report described as “highly collaborative” spearheaded an effort to redesign the science curriculum so that it better reflected the school’s emphasis on an integrated, project-based and thematic approach to learning. In the process, the curriculum became the focal point for teachers to work together in new ways. Rather than interacting with colleagues within their own scientific discipline (e.g., physics, chemistry, etc.), the new, interdisciplinary curriculum required teachers to work together across disciplinary boundaries, something that was not previously common practice, but is a feature of work at Knowles, where content activities are largely interdisciplinary. The Senior Fellow also developed online resource kits and an online forum that brought math and science teachers together for curriculum sharing.

Like other teachers in collaborative environments, this teacher’s work on transforming the science curriculum resulted in an increase in the span of network ties to bring together teachers in each of the scientific disciplines as well as the math department. While the strength of ties was already high in this collaborative school, the new curriculum provided a focus for their collaboration that aligned with the school’s learning goals and pushed them to span disciplines.

A Fellow in a less collaborative environment was also able to use curriculum development as a leverage point for building social capital. She was teaching in a large public school and wanted to improve the curriculum of a basic physics course that both teachers and students found unengaging. To do this, she brought together teachers of the course from across the district to form what was called a “hands-on physics” group. These teachers, who hadn’t previously collaborated, collectively transformed the curriculum. As a result of the success of this group, the district subsequently used this model for tackling curriculum reform in other disciplines.

In this instance, the teacher’s context required the development of a new structure for teacher collaboration, with curriculum development as its focus. The hands-on physics group increased both the span of network relations by bringing in teachers from other schools as well as the strength of the relationships as they worked on a focused project over time.

In both of these examples, Fellows themselves saw the need for curriculum change and either built on existing collaborative structures or introduced new

ones to accomplish their goals. In this way, curriculum development was the impetus for increased teacher relationships.

Influencing change by building teacher social capital

The Fellows featured in the case studies illustrate that building social capital in schools by strengthening collaborative teacher relationships is a successful approach to school improvement. However, these example also suggest that doing so can't be a "one-size-fits-all" type approach. Rather, strategies need to be employed to match the opportunities afforded in their particular context. Teachers can choose different leverage points based on their school context, with the outcome of increasing both the strength and reach of ties in their networks.

Those looking to strengthen collaborative relationships between teachers should pursue strategies best aligned with the context in which they work. Based on the cases included in the report we offer the following possibilities:

School Context	Approach to Building Social Capital	Effects on Social Capital
Less collaboration between teachers	Develop new structures for collaboration	Start by strengthening a limited number of network ties, then leverage to expand the span of ties
More collaboration between teachers	Focus existing structures on use of data, teaching practice and student outcomes	Leverage existing span of network ties to increase the strength of those ties
Evolving curriculum	Align new curriculum and pedagogical practices with desired student outcomes	Use curriculum development projects as means to increase network tie strength and span

Given the connection between teacher social capital and improved educational outcomes, any of these leverage points seem worthwhile for teachers to pursue as a productive strategy for change.

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