Center for American Progress

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Beyond Classroom Walls

Developing Innovative Work Roles for Teachers

Julie Kowal and Dana Brinson April 2011

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Introduction and summary

The teaching profession has long been structured around full-time classroom responsibilities that are defined by the location, timing, and schedule of the school day and a ubiquitous one-teacher-per-classroom model. In most districts, the only option for highly successful teachers to advance in the profession or serve more students is to leave the classroom to serve as an assistant principal, principal, or district administrator.

Exceptions to this traditional approach exist in many schools and districts across the country. According to a 2009 national survey, more than half of teachers (56 percent) and nearly half of principals (49 percent) report that at least some teachers in their school combine part-time classroom teaching with other roles or responsibilities in their school or district.[1]

But evidence does not suggest these nontraditional roles are particularly innovative, focused on enhancing teacher quality, or designed to extend the reach of the best teachers to more students.[2] A significant number include roles for teachers to serve as instructional or curriculum specialists, data coaches, or mentors—roles that typically remove teachers from the classroom to work with adults rather than students.[3] As author Frederick Hess points out, "even in the most innovative and dynamic charter schools, teaching bundles together the roles of content deliverer, curriculum designer, diagnostician, disciplinarian, discussion leader, empathizer, clerk, secretary, and attendant—and asks teachers to fulfill these roles for a variety of students in a variety of content areas."[4] When our research team went looking for innovative staffing models—those that engage highly effective teachers in new roles with students or other adults, beyond traditional classroom boundaries and schedules (see "Methods" box)—we found few experiments that fit our study criteria.

Yet nearly four in 10 teachers report that they are interested in combining their classroom work with other roles or responsibilities in their school or district, including 46 percent of teachers with five or fewer years of experience.[5] Across the country, interest is increasing in alternative approaches to school staffing that provide more flexible work roles and advancement opportunities for highly effec-

tive teachers—both as a means to recognize and retain teachers in hard-to-staff schools, and to allow the best teachers to have a positive impact on larger numbers of students.[6]

With this growing interest, the field needs to learn what it can from early adopters of role-shifting reforms. Here we profile two organizations—a small charter management organization based in California and a large school district in Virginia—that have recently pursued staffing innovations designed with these goals in mind. While they have taken very different approaches, both study sites offer examples of the types of roles that other districts, schools, and charter organizations can pursue to open up and professionalize teachers' work, while revealing several critical limitations related to design and implementation that the next generation of innovators should heed. We do not hold up these examples as models for other education leaders to replicate. However, from them we gain a better understanding of the design and policy conditions that enable or constrain staffing innovations; and offer preliminary lessons learned for other districts, schools, and charter organizations about how to yield the greatest impact for students.

Methods

To learn more about alternative school staffing models, we set out to study states, districts, traditional public schools, or charter schools that have recently implemented staffing innovations designed to improve career opportunities, provide more flexible work roles, or extend the reach of the most highly effective teachers. We gathered information about staffing innovations currently taking place around the country by scouring news articles and reports from major news media and Internet search engines, soliciting recommendations from colleagues, and tracking additional leads that arose from their recommendations.

From an initial list of sites, we chose two that best fit our study criteria, including:

- Developing new roles for teachers that enable them to reach more students and/or expand their impact beyond the classroom
- Using a quality screen to identify highly effective teachers to participate in the program
- Focusing on at-risk students and/or hard-to-staff schools
- Achieving promising results with students and teachers

Only one of the sites we discovered met all of these criteria (Rocketship Education). Fairfax County's Teacher Leadership Program provided the next-best fit: While participating schools did not use a standard quality screen to identify eligible teachers, the program met the other criteria. Other potential sites, including both district and charter schools, typically did not involve work roles designed to extend teachers' reach to directly or indirectly impact more students, or had not been in existence long enough to demonstrate positive or promising results.

For both the selected sites, we then conducted interviews with three to four members of the organization's staff, including teachers who have been affected by the changes, and conducted a detailed review of internal and publically available documents and data about results.

Experiences in our two case study sites suggest that district, school, and charter school leaders may pursue very different approaches to reach the same goal of making teachers' roles more flexible, dynamic, and rewarding—and to find success in very different contexts and circumstances. In their pursuit of these new types of roles, however, education leaders are likely to face several similar challenges with regard to design, systems, and policy no matter the particular innovations they adopt. With regard to the design of innovative work roles, education leaders can build on the experiences in our case study sites by:

- **Extending teachers' reach beyond traditional classroom boundaries,** through redesigns of both *organizational* structures and *job* responsibilities that enable great teachers to directly or indirectly reach larger number of students beyond their classroom walls

- **Considering teachers' individual strengths and weaknesses,** as well as their overall effectiveness in improving student learning, when conceiving and designing new work roles

- **Designing roles with both students' and teachers' interests in mind,** including a clear path between new roles for teachers and the student learning gains they want to achieve

- **Ensuring long-term financial sustainability** for what is too often an add-on program by keeping costs in mind from the start

- **Challenging traditional expectations** by embarking on a campaign with teachers, administrators, and other stakeholders to clarify the changes to teachers' daily roles and demonstrate the benefits of innovation in this realm for both teachers and students

Experience in our case study sites also suggests that education leaders should be mindful of the impact of internal systems and local and state policy when designing and implementing new types of work roles. These types of considerations include:

- **Collective bargaining provisions.** In many states and districts, implementing different work roles for teachers will require significant changes to collective bargaining agreements and current teacher contracts—particularly regarding teachers' work roles, schedules, and compensation. Pending those changes, education leaders will need to seek buy-in from participating teachers and proceed around existing agreements with care.

- **Class size mandates/certification requirements.** Ideally, state requirements regarding maximum class size and teacher certification should be loosened to permit staffing innovations that have positive impacts on student outcomes. While they are in place, however, experiences in our case study sites suggest that education leaders may be able to carefully work around them.

- **Payroll/HR administration.** Roles that depart from the traditional one-teacher, one-classroom model are likely to require changes to the salary schedule and payroll processes. Ideally, these types of systems would shift more authority to the school level to enable systems to adapt more easily to school-driven innovations. But while human resources and payroll systems remain centrally controlled and fairly one-size-fits-all, innovators will likely need to work closely with central office staff to ensure necessary accommodations.

- **Technological limitations.** Although there have been great strides in technology and learning software in recent years, there are still significant limitations that may impact the extent of what education leaders can do in the short term. Innovators should use technology where it provides a solution, and tap other resources—such as tutors and community-based organizations—to meet their needs as technology continues to develop.

Staffing innovators: Case profiles

Rocketship Education

Rocketship Education is a network of public charter schools operating in San Jose, California. Its three schools served more than 1,200 students in the 2010-11 school year, over three-quarters of whom qualify for free or reduced-price meals and are learning English as a second language.[7] Rocketship schools couple an extended schedule, tutoring, and rich classroom experiences with individualized instruction and computer-based learning to provide students with the resources they need to succeed academically. Rocketship's schools are among the very highest-performing among California's high-poverty schools—so much so that their results exceeded the statewide average for *all* schools in 2009-10 (see box, "Results in Rocketship schools").

At the center of Rocketship's design is a unique human capital strategy designed to redefine teachers' roles, better meet student needs, and ensure the network's financial sustainability. Rocketship has moved beyond the one-teacher, one-classroom model typically found in the nation's elementary schools by using program efficiencies and automated processes that narrow the scope of what teachers must do, deepen their content expertise, and allow them to reach more students. Carefully selected teams of tutors, lab monitors, and program providers from community-based organizations take on a variety of different roles in the school to address student needs and enable teachers' new roles. This design also produces significant cost savings that Rocketship reinvests in its students, teachers, and facilities—creating a model that is both effective at boosting student learning and financially efficient enough to scale without reliance on philanthropic or other external funds.

Impetus for the Rocketship approach

Rocketship founders John Danner and Preston Smith developed the school model in response to their discovery that many teachers in low-income, urban schools spend a large portion of their time "just covering the basics." Teachers

"No one becomes a teacher to do 'short A' and 'long A' sounds for four months. If we can offload a lot of that to an individualization program and let teachers spend more of their time on higher-order thinking, teachers will like their jobs more, and we can make better use of their time. Automating the things that no one really likes to do, while providing great professional development to help teachers get stronger at the things that are difficult to automate, makes teaching at Rocketship both more effective and fun."

—Rocketship Education cofounder John Danner

in traditional public schools often focus on math drills, vocabulary development activities, interim assessments, and other fairly routine tasks in an effort to move students performing below academic standards up to the proficiency bar. This work can be vital to help individual students develop their skills, but Danner and Smith wanted to create schools that allowed students to achieve at advanced levels and to be able to compete academically with students from upper-income neighborhoods. To do so, they designed a model that provides students with plenty of individualized drills and practice time, but also allows teachers to use classroom time to emphasize advanced critical thinking and advanced problem-solving skills.

Teaching roles in Rocketship schools

Rocketship's model creates roles for teachers that differ significantly from those of their counterparts in more traditional public schools. The design re-envisions teachers' daily routines and their roles within the school through:

- Innovative schedules for increased collaboration
- Systems to offload rote tasks
- Opportunities for teachers to develop mastery more quickly
- Integrated leadership roles and formal, tailored leadership development
- Reduced recruiting needs
- Financial efficiency

Let's consider each of these ingredients in turn.

Innovative schedule for increased collaboration

Rocketship schools use an extended-day block schedule that allows students to spend 200 minutes daily in an English, language arts, and social studies block; 100 minutes daily in a math and science block; and 100 minutes in a "learning lab." The learning lab provides students with small-group learning, computer-based instruction, and independent reading time focused specifically on the concepts on which they need additional exposure and practice. Rocketship provides daily after-school interventions for its most struggling students in addition to its extended-day schedule.

This model offers teachers more opportunities to collaborate around individual student needs. The after-school tutoring program for struggling students enables teachers to communicate with tutors and keep them abreast of the progress and

needs of individual students. Leaders and teachers have found that this process also enhances teachers' own work with those students. As Kate Coxon, Rocketship's manager of individualized learning, observes, "We provide time for a teacher and tutor to sit in a room together so the tutor can ask questions. This time has created much more discussion among teachers about students' individual needs than typically happens in traditional schools where teachers work alone in their classrooms."

Systems to offload rote tasks

Rocketship's leaders have identified areas of teaching that focus on more routine tasks, such as drilling math facts or engaging in daily assessments and grading, and have assigned many of these tasks to assistant educators and computer programs in the "learning lab." This structure enables a tighter focus and efficiency, but also frees up time for teachers to work with more students on higher-order tasks. Many types of assessments, for example, can be automated without reducing the quality of the assessment process. Rocketship's computer-based assessments save teachers time by collecting data automatically, and enable them to focus on high-level analysis by producing a variety of sophisticated reports.

Rocketship has also invested in the development of well-organized, easily accessible instructional resources that align with its basic curriculum, to reduce the amount of time teachers have to spend on planning. Kate Coxon explains, "We provide teachers with a strong starting point, so they don't have to spend all of their time hunting down materials or trying to find the right resources for students at certain levels. Not having to prepare lessons for every subject allows teachers to strengthen their planning on developing rich lessons and highly engaging activities."

In addition, some basic elements of instruction do not require the skills of a master teacher. Rocketship has found that community-based tutors armed with up-to-date assessments and high-quality scripted lessons can be equally effective at working with students to drill fundamental math facts or vocabulary. Rocketship relies significantly on community-based tutors to take these tasks off classroom teachers' plates while providing individualized instruction for students.

Opportunities for teachers to develop mastery more quickly

In traditional elementary schools, a teacher in a self-contained classroom typically teaches each subject—English, language arts, social studies, math, and science—once per day. Teachers at Rocketship teach fewer subjects over which they gain greater mastery more quickly.

"There is no reason for teachers to spend their limited time on tasks that can be automated or accomplished in other ways."

—Rocketship Education cofounder John Danner

Teachers who work in literacy and social studies, for example, teach their lessons to two groups of students each day, doubling their exposure to those topics and allowing teachers much more intensive practice each year. Teachers in the math and science content area present their lessons four times each day, quadrupling their exposure and practice in the first year. Teachers—especially those new to the profession—improve their craft and their subject matter knowledge much more quickly as a result of this extra exposure. They also have an opportunity to teach the same lesson back-to-back with separate groups of students, rather than having to wait a year before giving it again, which enables more rapid redirection if a particular lesson or approach isn't effective on the first try.

Integrated leadership roles and formal, tailored leadership development

In addition to allowing teachers to focus more of their time and energy on high-level instruction, the technological and staffing innovations at Rocketship also encourage teachers to take on both formal and informal leadership roles. Adam Nadeau, a principal-in-training at Rocketship, explains that "every teacher at Rocketship is considered to be in Phase One of leadership training, because teaching at Rocketship is itself a leadership position." For example, teachers who have shown particular strengths in a topic area or technique provide a portion of Rocketship's professional development.

Interviewees reported that there is an expectation that teachers who have the capacity to lead—whether as a teacher, an academic dean, or a principal—define and take on those roles for the benefit of the entire school, particularly because Rocketship is expanding rapidly. Rocketship also provides a formal leadership development program for teachers who want to take on leadership roles beyond their positions as teachers. The program begins while teachers are still in the classroom and leads to several leadership opportunities, including a potential principalship in other Rocketship schools.

Reduced recruiting needs

By extending teachers' reach to larger number of students, Rocketship is able to reduce the number of certified teachers necessary from 21 to 16 at each school, without increasing class size. At Rocketship schools, each English and social studies teacher teaches two 200-minute blocks with 20 to 25 students, and every math and science teacher conducts four 100-minute blocks with the same size group. Coupled with the learning lab component for one-quarter of the students' day, schools are able to reach the same number of students with fewer teachers than required at traditional elementary schools (see Figure 1).

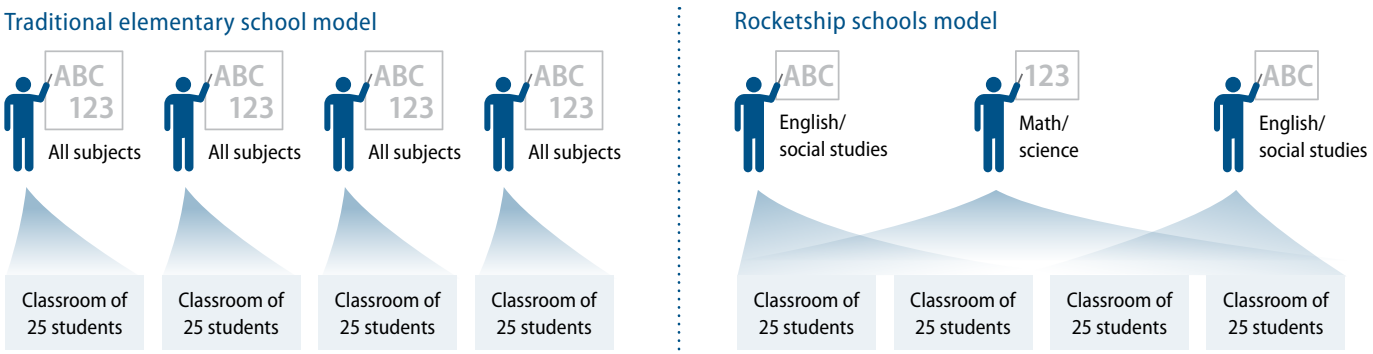
A key advantage of this design is that Rocketship has to find fewer high-caliber teachers to serve its students. Each time Rocketship opens a new school, leaders have to identify only 16 teaching candidates on average, whereas a typical elementary school would have to seek out more than 20. With teaching talent in high demand, filling fewer teaching slots gives Rocketship leaders a better chance of finding the best.

Financial efficiency

There are financial savings to the Rocketship model as well. By reducing the number of certified teachers required to meet students' needs, Rocketship is able to save half a million dollars per school every year. It reinvests the funds saved through this model into higher teacher salaries, after-school tutoring, instructional improvements, and facilities capital. The total cost per pupil, including capital costs, is $7,145 per year, within the per-pupil funding Rocketship receives.[8] As a result of its staffing model, unlike many charter schools, Rocketship does not have to subsidize day-to-day operations with philanthropic support.

FIGURE 1

Staffing designs in traditional and Rocketship elementary schools



In the traditional elementary school model, each teacher works with a single classroom of students in English/language arts, social studies, math and science. With a class size limit of 25, four teachers would be required to reach 100 students in each subject.

In the Rocketship model, English/social studies teachers teach two 200-minute blocks of 25 students each, and math/science teachers teach four 100-minute blocks of 25 students each. Thus, just three teachers can reach the same 100 students each day.

Results in Rocketship schools

There is little question that Rocketship's model is a success, allowing even its newly opened schools to significantly boost student performance in the first year. Rocketship's first school, Mateo Sheedy Elementary, or RMS, serves a student population in which about four out of five students are English language learners and 78 percent qualify for free and reduced-price meals. In the 2009-10 school year, 92 percent of RMS's students met state standards in math and 78 percent did so in English. As a result of this performance, RMS earned an Academic Performance Index (API) score of 925. Compared to the state goal of 800, the local district's average of 792, and a statewide average of 869 among non-low-income students, Rocketship Mateo Sheedy is clearly ahead of the pack.

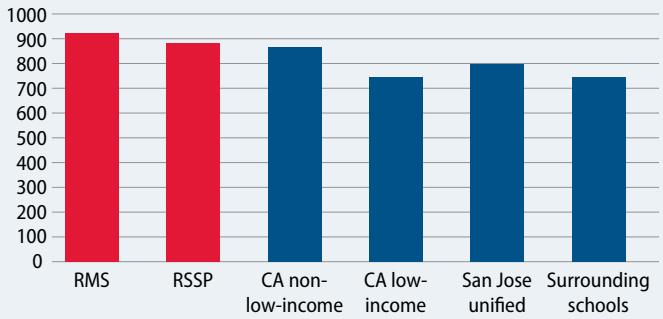
Rocketship's second school, Si Se Puede Academy, or RSSP, opened in August 2009 and scored an 886 API in its first year of operation. Mateo Sheedy and Si Se Puede placed fifth and 15th on the list of highest-performing schools serving a similar student population in the entire state of California in 2009-2010, compared with other schools serving a student population with at least 70 percent of students qualifying for free or reduced-price meals.

In response to Rocketship's strong student outcomes, more than 50 school superintendents have visited Rocketship schools in the last year, seeking guidance on providing similar programming for their own students while achieving cost savings at the same time. Other impressive results include Rocketship's success in building new school facilities for each new charter school, providing average teacher pay that is 10 percent to 20 percent higher than in the surrounding district, and building a robust professional development program administered by an on-site academic dean while operating within the current per-pupil funding the school receives.

Rocketship continues to expand. It opened a third school in the fall of 2010 and plans to open additional schools in San Jose and elsewhere in the United States as its management organization develops capacity.[9]

FIGURE 2

API results in Rocketship and other California schools, 2010



Source: California Department of Education

Fairfax County Public Schools

Jack Dale is the superintendent of Fairfax County Public Schools in northern Virginia, the eleventh-largest school system in the country. The district is comprised of nearly 200 schools, which in the 2010-11 school year served just over 175,000 students—approximately 22 percent of whom were from low-income backgrounds. He has spent much of his career focused on transforming the teaching profession. "It has been my goal to develop a system that treats teachers as professionals." When Dale arrived at FCPS and shared his vision for transforming the teaching profession, he found an ally in Leslie Butz, assistant superintendent of a school cluster. "I wanted to professionalize teachers' roles as well," Butz explains. "I am interested in compensating teachers for additional leadership responsibilities they take on and encouraging others to take on these roles as well."[10]

The district developed the Teacher Leadership Development grant competition to translate this philosophy into practice in Fairfax County. The competition elicited applications for school-level programs that improve the quality of instructional programs while providing teachers with roles that broaden their reach and engage them in school leadership, without requiring them to leave the classroom. The Fairfax experience offers lessons both about encouraging school-level staffing innovations and the limitations in traditional school districts that can constrain them.

"Our goal is to develop a system that treats teachers as professionals. The best should have an opportunity to become leaders in their schools, without leaving the classroom or having to go into administration."

—Jack Dale, Superintendent, Fairfax County (Virginia) Public Schools

Impetus for staffing innovations in Fairfax County

Fairfax County Public Schools released a Request For Proposals in 2006 for the Teacher Leadership Development grant to develop new roles for teachers within at least one of five areas:

- Guiding school-wide improvement strategies
- Mentoring and training other teachers
- Providing extended student learning opportunities
- Expanding student supports
- Enhancing vertical articulation of the curriculum (i.e., aligning the content and skills students are expected to learn by the end of one grade level with those required for them to successfully take on the next grade level's work)[11]

A temporary surplus in the district's annual budget funded the grants.

A third (62) of the district's nearly 200 schools applied for Teacher Leadership Development, or TLD, grants. Grant applications included individualized pilot projects with extended-year teacher contracts to meet staffing needs to develop and implement the pilots. District staff reviewed and ranked each application, and ultimately provided 24 schools with a total of about $2.2 million each year for three years, enabling them to engage nearly 600 teachers in new roles. After the three-year TLD grant period, Fairfax County Public Schools chose to provide continued funding for nine schools that had the most success with their pilot efforts. These funds were no longer available by the 2010-11 school year, however, and the programs in these schools, plus the future expansion originally envisioned, has been put on hold.[12]

New roles for teachers under the Teacher Leadership Grants

Fairfax County designed the TLD grants program to spark bottom-up initiatives with significant input from teachers and principals. Rather than stipulating the components of new work roles and providing funds to schools willing to implement them, district leaders asked schools' staff to assess their own needs and, within specific parameters, design individualized plans to support the development of teacher leadership roles and new skills. School-level teams designed and implemented 24 programs, which varied significantly in the degree of innovation applied to teachers' new roles. Across the grantees, approaches to modify teachers' work roles included several similar strategies, including staffing innovations to leverage teachers' individual strengths, evaluate and refine curriculum and instruction, facilitate greater collaboration among teachers, and enhance parental involvement.[13]

Leveraging teachers' strengths

TLD grants were often used to provide highly effective, experienced, or specially trained teachers the opportunity to train and mentor less-experienced or struggling teachers. For example, at Westlawn Elementary, a Title I school, teacher leaders developed a summer Lab School during which they provided new and developing teachers the opportunity to observe lead teachers in action and practice and refine their own teaching skills under the guidance of their experienced peers. Similarly, Woodburn School for the Fine and Communicative Arts used the TLD grant to leverage the skills and expertise of seven teacher leaders who had special training in integrating arts into the curriculum. The grant supported additional paid time for teacher leaders to create staff development activities for all teachers focused on arts integration strategies that improve instruction and student engagement.[14]

Refining curriculum, instruction, and pacing

Many schools used their TLD grants to provide a select group of teachers the opportunity to critically examine their school's curriculum and identify adjustments to better meet the needs of their particular student population. London Towne Elementary, for example, used TLD grant funds to provide grade-level team leaders with extended contract days to examine the school's instructional practices, analyze data to identify common student weaknesses on state standards, refine the school's curriculum maps to better meet their needs, and train teachers on the new approaches. Team leaders then spent a portion of their time during the following year facilitating team meetings centered on the new strategies and helping their peers deploy the skills they developed during the summer training.[15]

Dogwood Elementary received a TLD grant during its second year of school improvement status under the federal No Child Left Behind Act. The school used the grant to create and implement modified calendars and pacing guides in core subject areas. A select group of teachers took on leadership responsibilities and spent extra time adapting the school's previous curriculum and pacing to better meet the learning needs of Dogwood's highly transient student population.[16]

Facilitating greater collaboration among teachers

Several schools used TLD funds to build greater collaboration among teachers, and used collaborations more deliberately to strengthen instruction and student outcomes. West Springfield High School, for example, used TLD grants to enable groups of teachers to assess the needs in their departments, establish priorities for accelerating student learning, develop strategic plans to meet each priority, and monitor their success over the course of each year.[17] West Springfield's principal tasked teachers with conducting needs analyses and developing their own responses to build ownership, commitment, and enthusiasm for school change efforts (see box, "The Teacher Leader Program at West Springfield High School").[18]

Enhancing parental engagement

Some TLD grants deployed additional teacher time to improve family involvement in schools, especially families of students at risk of falling behind academically. Three elementary schools (Mantua, Little Run, and Wakefield Forest) co-developed a program in which teachers worked to identify and work with at-risk kindergarteners to develop literacy skills. The teachers also provided literacy development programs that parents could use at home with their children. Similarly, William Halley Elementary used TLD funds in part to support home visits by a select group of teachers so that they could build better home-school connections, in particular for English language learners and economically disadvantaged students.[19]

The Teacher Leader Program at West Springfield High School

West Springfield High School in Fairfax County, Virginia, used its Teacher Leadership Development grant to develop multiple initiatives that engaged teachers in school-level planning, analysis, and program design to develop their leadership skills and make an impact on student learning beyond classroom walls. When the school received the grant from the district, former principal David Smith invited teachers and teacher teams to identify critical needs at the school and submit their proposals to address them.

As a result, several groups of teachers designed plans to address varying needs they saw among their students. A group of science teachers, for example, collaborated to design, promote, and train other teachers on a new biology curriculum designed to better transition ninth-grade students into the academic demands of high school. They also designed and implemented a school-wide Freshman Boot Camp to help new students acclimate to more rigorous grading and attendance policies, and develop the study and organizational skills they would need through graduation. Some teachers also studied, implemented, and designed a standards-based grading system to align all classroom grades at the school with state standards and end-of-grade assessments. Teachers from the English and government departments collaborated to develop a cross-curricular Senior Capstone project designed to engage students in service learning and a long-term research project, while reducing dropout rates and promoting student autonomy.[20]

At West Springfield—as in most Fairfax County schools participating in the TLD program—teacher-led projects involved additional work time for teachers. Teachers worked after school, on Saturdays, or at the beginning or end of the school year rather than taking on new roles during the school day. Teachers' roles in classrooms remained very much the same. But through the projects made possible under the TLD grant, participating teachers gained the opportunity to build their leadership skills, engage in school-level analysis and planning more typical of administration positions, and design systems and projects that had an impact on large numbers of students beyond their individual classrooms. Kerry Keith, an English teacher at West Springfield and leader of the Senior Capstone project, noted that "the program provided an opportunity for teachers to build leadership experience while focusing on student results. In fact, the process of developing the senior capstone project was the impetus that made me want to become a formal leader in my school."[21]

Results of the Teacher Leadership Development Grant Program

The TLD program was designed with two primary goals: improving teacher satisfaction and retention, and improving student achievement. Without more direct study, of course, it is not possible to tie student achievement results in TLD schools to teachers' participation in the program. Indeed, across the 24 pilot schools (16 elementary, three middle, and five high schools) receiving TLD grants, improvement in academic achievement varied. Some schools improved academic achievement as well as student participation in International Baccalaureate and Advanced Placement programs. Other schools, however, did not demonstrate significant academic gains over the grant period.

Student performance. Figures 3 and 4 on page 15 show the percent of students who were proficient on state reading and math exams for schools receiving four years of TLD grants, including baseline data and performance over the course of their participation in the grant program.[22] Most schools showed some improvement over the grant period, and some saw significant gains; for a few, performance decreased slightly or remained much the same.

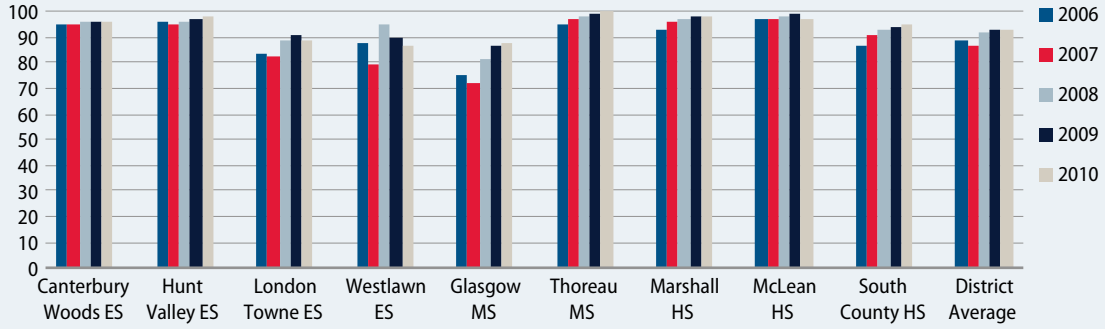
Other outcomes

Several schools that participated in the TLD grant program also set out to achieve and reported positive, nonacademic results as well. In particular, school climate surveys administered during the second year of the TLD grant revealed that teachers in several participating schools expressed greater satisfaction with their schools' leadership teams and with the professional development opportunities available to them than their nongrant recipient peers.

From a district perspective, the TLD grant program offers some continuing benefits, even though budget cutbacks have put the program on hold. As Assistant Superintendent Leslie Butz explains, "As a result of this initiative, the district has a deeper bench of leaders within our classrooms. Principals now have more teachers they can rely on who are experienced in many of the [school leader's] traditional roles."

FIGURE 3

Percentage of students scoring proficient in reading, four-year TLD grant recipients

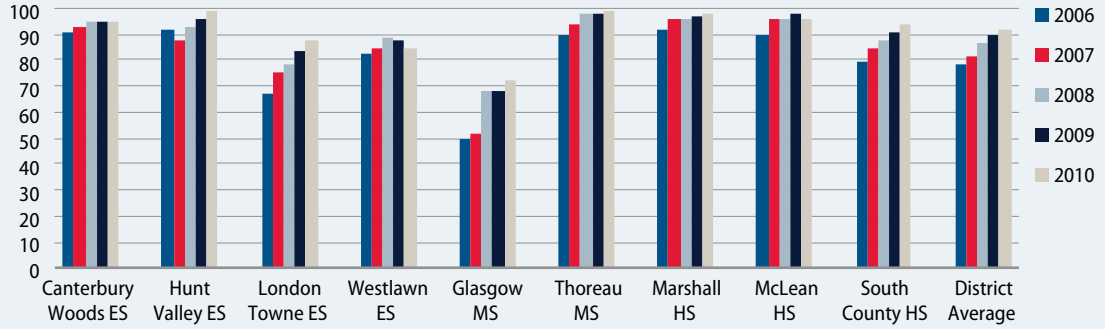


Source: Fairfax County Public Schools School Profiles (2011), available at http://schoolprofiles.fcps.edu

Note: In 2006, certain Limited English Proficient students were able to take the Stanford English Language Proficiency test (SELP). In 2007, there was neither SELP nor VGLA. In 2008, certain Limited English Proficient students were assessed with the Virginia Grade Level Alternative (VGLA).

FIGURE 4

Percentage of students scoring proficient in math, four-year TLD grant recipients



Source: Fairfax County Public Schools School Profiles (2011), available at http://schoolprofiles.fcps.edu

Lessons for local and national leaders

Superintendent Jack Dale asserts that his goal with the Teacher Leadership Development grant program in Fairfax County Public Schools was ultimately "to transform the teaching profession across America." Rocketship Education founders John Danner and Preston Smith also began with the goal of radically changing how schools work across the country. They designed Rocketship's model—extending teachers' reach while greatly increasing individualized support for students—to include fundamental efficiencies and cost savings that could be implemented in any school or district.

Instituting new work roles for teachers, however, requires careful design, thoughtful implementation, and a supportive policy environment. In addition, while both study sites offer examples of work role innovations currently in place, they also provide opportunity for other districts, schools, and charter organizations to push innovations even further in service of teachers' and students' needs. Experiences in our two case study sites suggest that district, school, and charter school leaders are likely to face several similar challenges no matter the particular design they employ. While these are just two case studies with their own unique circumstances, leaders elsewhere can benefit from several lessons learned so far.

Design lessons

Extending teachers' reach beyond traditional classroom boundaries

The Rocketship Education approach to schooling and the Teacher Leadership Development grant program in Fairfax County both, to varying degrees, define roles that enable teachers to make an impact on students, programs, and policy beyond traditional classroom walls. In Rocketship schools, teachers reach far more than the usual number of students than individual teachers in traditional elementary schools through use of a block schedule and strategic offloading of rote tasks. In addition, many Rocketship teachers have an opportunity to make an impact on students school-wide, through both informal and formal leadership

roles that engage them in decisions about programs and policy. These new roles required both *organizational* redesign—rethinking the way that schools as a whole are organized—and *job* redesign, including changes to teachers' responsibilities and instructional roles.[23]

Many teachers who participated in Fairfax's TLD grant program were similarly able to reach a larger number of students indirectly, through mentorship or training for other teachers, planning and needs assessment at a grade, subject, or school level, and development of school-wide programs. While none of the schools that received TLD grants engaged in significant organizational redesign to systematize these new roles—and teachers' additional work was an add-on to the traditional school day—job-level redesigns nonetheless enabled school leaders to distribute their responsibilities more broadly throughout the school, and engaged teachers in new and often newly challenging roles.

Leaders in other districts, schools, and charter organizations can build on the experience in these case study sites by considering redesigns of both organizational structures and job responsibilities. By questioning basic organizational assumptions inherent in the one-teacher, one-classroom model, schools and districts can move beyond add-ons to the school day or year, for example, to offer star teachers the opportunity to directly manage multiple classrooms with several teachers under their formal supervision.

Leaders in other schools and districts can move beyond the offloading of routine tasks used in Rocketship schools to completely remove noninstructional roles from the plates of teachers who excel at direct instruction, or enable them to focus on the subjects in which they are most effective. Education leaders can also make greater use of technology to restructure teachers' responsibilities and time, such as by offering videos of content recorded by top-notch instructors and focusing other teachers' time on small-group instruction.[24] By considering not just individual teachers' job responsibilities, but also the organization of the school or district as a whole, education leaders can create new roles that recognize and retain great teachers, and allow the best to have a positive impact on larger numbers of students.

Considering teachers' effectiveness and individual strengths

A key design element involved in creating new work roles for teachers is examining their individual strengths and weaknesses and overall effectiveness in improving student learning. Rocketship schools select teachers almost exclusively from

the Teach For America corps to help create an overall high-quality teaching force. The schools have found corps members often bring enormous energy, drive, and a record of excellence to the classroom. At the school level, teachers are assigned to subject areas based on their training and expertise, and thus reach a larger number of students in their main subject area of focus. But among each school's staff, teachers largely self-select for formal and informal leadership opportunities. Rocketship carefully monitors the development and performance of candidates on its formal principal development tracks, but does not screen other leadership candidates based on quality—teachers typically self-identify their own strengths and design their own development activities.

None of the schools that participated in Fairfax County's TLD grant program used a formal quality screen or systematically considered teachers' individual strengths in designing new work roles. While the district carefully screened and ranked individual schools' grant applications based on their adherence to the program design, the teachers who ultimately carried out funded programs were identified either by the principal or upon their own volition.

Other district, school, and charter leaders can expand upon the experience in both of these case study sites by rigorously and systematically considering teachers' effectiveness and competencies when designing new work roles. The goals of individual programs—including recruitment, retention, and improving student learning—should direct the identification of teachers who become eligible for new roles and responsibilities. The best teachers, identified using multiple measures, should be empowered to broaden their reach, and their individual strengths should largely direct the parameters of their new roles. Great teachers are likely a diverse group. Some would excel at helping other teachers improve; others would not. Some would thrive teaching thousands of students online; others would fall short using that medium. At an organizational level, it then becomes critical to build in sufficient flexibility to allow school and district leaders to continually adjust work roles in response to individual teachers' development and shifts in the overall strengths of school staff.

Designing roles with both students' and teachers' interests in mind

The ultimate goal of the staffing innovations in our case study sites was to improve outcomes for students, both in terms of their learning experiences and their achievements. Rocketship schools, for example, are designed specifically to help minority and low-income students reach proficiency and compete with their peers from wealthier backgrounds through greater individualization, high-quality teachers, and a

focus on higher-order skills. Also at the core of the TLD grant program in Fairfax County Public Schools was a focus on increasing meaningful learning opportunities for students and maintaining high student achievement.

Both sites were also able to design their systems to create more attractive opportunities for teachers and bring a greater sense of professionalism to their roles, by enabling them to focus on instruction, enhancing leadership opportunities, and providing more time for collaboration. Other district, school, and charter leaders can develop similar roles with these twin outcomes by drawing a clear path between new roles for teachers and the student learning gains they want to achieve.

Ensuring financial sustainability

Creating new work roles for teachers may involve increased costs, including expenditures for initial design and ongoing implementation. But these initiatives do not have to require additional funds. Charter, school, and district leaders can ensure long-term financial sustainability for what is too often an add-on program by keeping costs in mind from the start when designing innovative new roles.

As Rocketship's model demonstrates, innovative work roles can be a cost-saver in themselves. By designing structures that enable fewer teachers to serve more students, Rocketship is successfully serving high-need students while scaling up within the confines of existing public resources. Its schools use personnel cost savings to fund their signature resources, including learning labs, after-school tutoring, on-site Academic Deans, and new school facilities.

The TLD grant program in Fairfax County was funded through a temporary surplus in the district's personnel budget but, as noted above, funding was discontinued. This required schools to dismantle their programs when decreasing overall budgets caused these funds to disappear. In hindsight, Superintendent Jack Dale says, "because we designed our program as an add-on to each school's budget, it was one of the first things to go when the budget got tight. Had I seen the economic crisis coming, I would have integrated funding for these types of leadership roles into the regular operating costs of the district."

Greater flexibility in collective bargaining agreements over existing stipends for teachers could have also enabled the district to redirect funds dedicated to department level, grade level, and other leadership positions to the new roles that schools developed. As Superintendent Dale recognized, the district might also

have freed up additional funds by eliminating some responsibilities held in its central office—particularly related to curricular pacing and professional development—that teachers increasingly took on through the TLD program. Many schools in Fairfax County could have continued to implement similar programs without the infusion of extra TLD funds by redirecting existing funds, and formally recognizing some teachers' service to larger numbers of students.

"The key to sustainability is to embed funding for new types of leadership roles into the core operations of the district or school."

—Jack Dale, Superintendent, Fairfax County Public Schools

Challenging traditional expectations

Nearly half of current teachers express an interest in work roles that combine their classroom work with other roles or responsibilities in their school or district. Incorporating these new types of responsibilities into the daily reality of schools, however, still requires a new way of thinking. Public schools across the country are built around an egalitarian model in which every teacher ostensibly engages in the same type of work and staff members are largely interchangeable.[25] Singling some teachers out for new roles and a broader reach, particularly when these decisions are based on evidence of their effectiveness, challenges many assumptions and traditions inherent in this model.

As Rocketship's John Danner reports, "The individualization and automation inherent in our design still feels really foreign to many in mainstream education." Teachers in Fairfax schools receiving TLD grants often found that their new leadership roles required skills and ways of interacting with their peers in which they lacked experience. One teacher noted, "I had to think outside the box to keep my colleagues moving toward our goal, even though I didn't have any formal training in conflict resolution or influencing others." A handful of teachers in participating schools—and even in some that did not apply for the grants—also resisted the idea of developing special roles for some teachers and paying them more than their peers. Fairfax County Superintendent Jack Dale advises that even if teachers generally support the idea, "there are an amazing number of cultural practices you have to break through."

In other districts, schools, and charter organizations that are committed to developing new roles for the best teachers, leaders will likely have to embark on a campaign to clarify the changes to teachers' daily roles and demonstrate the benefits for both teachers and students. As new cadres of teachers enter schools in which the one-teacher, one-classroom model is no longer the rule, however, these

cultural assumptions will give way to a new norm in which teachers' performance and skills are recognized and rewarded with opportunities to strongly affect students beyond classroom walls.

Considerations for systems and policy

Collective bargaining provisions

Implementing new types of work roles for teachers in many states and districts will require significant changes to collective bargaining agreements and current teacher contracts. Pending those changes, education leaders will need to proceed around existing agreements with care, and seek buy-in from participating teachers.

Rocketship schools do not collectively bargain with a local teachers' union due to their charter status, and therefore are free to implement a variety of changes to teachers' roles within the parameters of state law. Virginia law does not permit teachers to collectively bargain, so Fairfax leaders also did not have to formally bargain with local teachers' unions or modify bargaining agreements to support schools' changes to teachers' roles.

District leadership did engage the Fairfax Education Association, the local professional association for teachers, to share information about the TLD grant program and prepare the association for accompanying changes in teachers' roles and compensation. Leslie Butz remarked that "the degree of pushback we found initially was surprising. Professional associations typically want each teacher to be compensated equitably, so even though we were offering the opportunity to earn additional pay, differentiated contracts went against what they were used to." Ultimately, however, district staff reported that the association supported the TLD grant program because of the connection between teachers' additional compensation and their additional responsibilities.

Class size mandates/certification requirements

Most districts, schools, and charter organizations will also have to keep a close eye on state requirements regarding maximum class size and teacher certification when designing and implementing new roles for teachers. Ideally, class size and certification requirements should be loosened to permit staffing innovations that

have positive impacts on student outcomes. While they are in place, however, experiences in our case study sites suggest that education leaders may be able to carefully work around them.

Rocketship's reach extension model, for example, is only possible because the school provides students with an extended day. One-quarter of Rocketship students' days are spent in the learning lab, time overseen by non-credentialed staff. Its program meets California state requirements for both class sizes and minutes of daily instruction by certified teachers because Rocketship provides extended block scheduling. Founder John Danner noted that if Rocketship provided the block schedule and learning lab without an extended day, the model would run afoul of state requirements because the learning lab is not led by a certified teacher.

Schools that participated in the Fairfax TLD grant program did not have to work to accommodate state class size or certification requirements because their programs were designed to engage teachers in new roles outside of their normal classroom responsibilities and during summer break. In addition, class sizes remained the same. Models that integrate teachers' new roles more fully into a new organizational design or extend their reach to a larger number of students, however, are likely to run up against these requirements in most states.

Payroll/HR administration

One of the challenges of implementing any type of change to teachers' roles or compensation is accommodating differentiation and new routines in central human resources systems. Teachers' roles will depart from the traditional one-teacher, one-classroom model, and likely require changes to the ubiquitous salary schedule that compensates all teachers on the basis of degrees and experience. Both of these peculiarities created challenges in Fairfax's finance and human resource offices, particularly as the changes were first put into place.

Ideally, these types of systems would shift more authority to the school level to enable systems to adapt more easily to school-driven innovations. But while human resources and payroll systems remain centrally controlled and fairly one-size-fits-all, innovators will likely need to work closely with central office staff to ensure necessary accommodations.

Fairfax County leadership, for example, found that the TLD grant program required significant cooperation with the district's human resources staff to accommodate a longer work year and the accompanying changes to teachers' accrual of sick leave and vacation days, insurance obligations, and retirement plans. Jack Dale reported that "the importance of the payroll issue was surprising." But once these changes are systematized, as they have been among Rocketship schools, they become part of the normal operations and policy of the district or management organization.

Technological limitations

Some of the more radical changes to teachers' traditional roles will rely upon technology to carry out tasks that teachers currently handle in most classrooms today. The innovators at Rocketship Education have found, however, that although there have been great strides in technology and learning software in recent years, there are still significant limitations that may impact the extent of what education leaders can do in the short term. According to Kate Coxon, manager of individualized learning at Rocketship, "the software isn't quite there yet in some areas."

To help support teachers' work with larger numbers of students, for example, Rocketship has sought out programs that can take basic-skills work off teachers' plates by automating drills, assessments, and other rote tasks, but can also be tailored to students' individual skill levels. Ideally, software would support teachers' work by reinforcing concepts introduced in the classroom, meet students where they are currently performing, and adapt as they improve their skills, all within certain parameters set by the teacher. John Danner says that in the absence of this technological capacity, Rocketship relies largely upon its noncertified tutors for these roles, who "work with students in skill-level matched groups, with a scripted curriculum and clear, eight-week objectives that keep students progressing." As interest and innovation in new work roles increases, there will be an even larger need for technology that automates many tasks for teachers while individualizing experiences based on student need. As that technology develops, innovators can follow Rocketship's lead by using technology where it provides a solution, and tapping other resources—such as tutors and community-based organizations—to meet their needs.

Conclusion

The job of "teacher" in most schools today remains centered on full-time classroom responsibilities that are defined by the location, timing, and schedule of the school day and a one-teacher-per-classroom model. Even in the districts and schools that have implemented new work roles for teachers, they are not typically focused on enhancing teacher quality, or on rewarding and extending the reach of the best. Instead, many "career innovations" for teachers typically remove them from the classroom and lessen their impact on students. But interest in quality-focused job redesigns is increasing among forward-thinking state, district, and charter school leaders. The two case studies profiled here provide examples of innovations in action and an initial set of lessons learned to inform and improve reform efforts in other districts and schools across the country.

Endnotes

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Public Impact is a national education policy and management consulting firm based in Chapel Hill, N.C. We are a team of researchers, thought leaders, tool-builders, and on-the-ground consultants who help education leaders and policy-makers improve student learning in K-12 education.

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