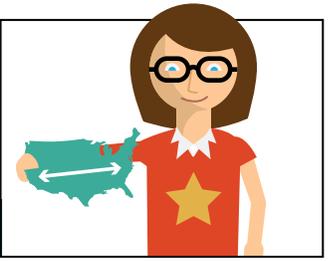


REDESIGNING SCHOOLS

TO REACH EVERY STUDENT WITH EXCELLENT TEACHERS

FINANCIAL PLANNING SUMMARY



OVERVIEW

This brief summarizes the ways that schools and their teachers can simultaneously reach more students with excellent teaching, expand teachers' career opportunities, and sustainably fund higher pay and other priorities.

This is based on Public Impact's school models that use job redesign and technology to extend the reach of excellent teachers to more students, for more pay, within budget. Most of these models create new roles and collaborative teams, enabling all teachers and staff to develop and contribute to excellence.

Savings and cost calculations of three school models—Multi-Classroom Leadership, Elementary Subject Specialization, and Time-Technology Swap Rotation—illustrate that **schools could increase excellent teachers' pay up to approximately 130%, without increasing class sizes and within existing budgets.** In some variations, schools may pay *all* teachers more, sustainably. Combining models to extend the reach of excellent teachers and promote excellence by all instructional staff may produce even greater savings for higher pay and other priorities, while also producing excellent results for more students.

We call this an "Opportunity Culture." In an Opportunity Culture, all teachers have career opportunities dependent upon their excellence, leadership, and student impact. Advancement allows more pay and greater reach. Development toward excellence is possible for all staff, in every role.

When teachers reach more students, additional per-pupil funds become available to support those teachers' work. This additional funding, minus new costs, can be used for higher pay and other priorities, according to the values, needs, and priorities of each school.

In this brief, we summarize:

- * **School models** for extending the reach of excellent teachers (see the Appendix on page 8 for more)
- * **How reach models can generate savings** that schools can use for higher pay and other priorities
- * **How schools can use savings**, including paying teachers more
- * **A comparison of savings and cost factors, and of pay increase potential**, when using different reach models

For more information, see OpportunityCulture.org, which provides **school model summaries, detailed models and tools, teacher career paths**, and more. Detailed models include *pay changes* and *cost savings* sections specific to each model. Visit often for updated materials.

SCHOOL MODELS FOR EXTENDING THE REACH OF EXCELLENT TEACHERS

Excellent teachers can extend their reach by **specializing** in their best subjects and difficult teaching roles, **swapping time for technology** using digital instruction so that teachers can teach more students, **leading other teachers** and co-teaching with them, or by **teaching larger classes** (within reason, by choice).

Most excellent teachers are in schools, of course, teaching face to face and/or leading other teachers. When the shortage of teachers is extreme (overall or in certain subjects), great teachers can be **remotely located**, with help from on-site paraprofessionals who nurture the whole child. Remotely located teachers use tools such as webcams, online whiteboards, and email to teach and connect personally with students.

Combination models can help great teachers make the best use of time and talent—expanding their impact on students and peers, while saving time for planning, collaboration, and development. Different models will be right for different schools and teachers, and no one model will fit all. See the Appendix on page 8 for a hyperlinked table of reach models.

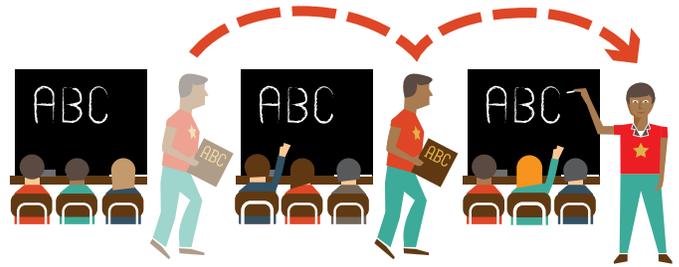
Extending the reach of excellence requires excellent results. Schools should use each tactic only to the extent that teachers reach more students without lowering student outcomes below the excellence bar. School leaders who choose models wisely—to reach students with teachers who are most consistently excellent in a particular subject or role, and with the support each teacher needs—may find that improved student outcomes lead to increased public support for additional school funding.

School Model Snapshots



CLASS-SIZE INCREASES

Excellent teachers teach larger classes, by choice and within limits, in some cases shifting students from other teachers' classrooms.



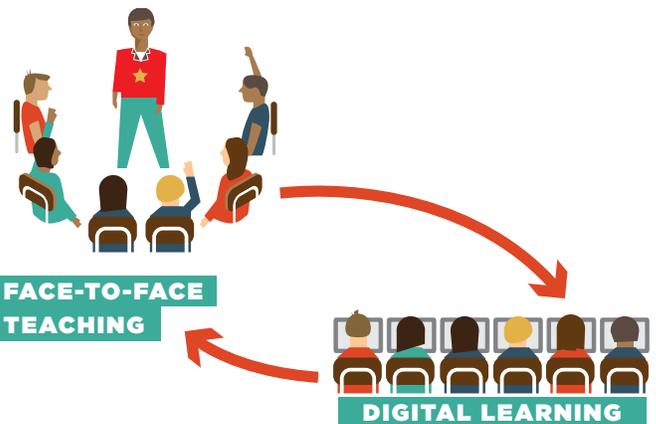
ELEMENTARY SPECIALIZATION

A school's best teachers teach one of two core subject pairs: math/science or language arts/social studies, while teammates take care of students the rest of the time and cover administrative work. This allows specialized teachers to instruct multiple classrooms of students and gain more time for planning and collaboration.



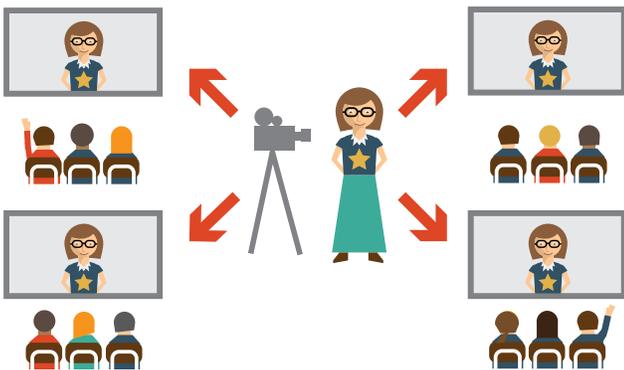
MULTI-CLASSROOM LEADERSHIP

Teachers with leadership skills both teach and lead teams or "pods" of other teachers in order to share strategies and best practices for classroom success. Responsible for achieving high growth for all classrooms in the pod, the teacher-leader determines how students spend time and tailors teachers' roles according to their strengths.



TIME-TECHNOLOGY SWAPS

Students spend part of the day engaged in self-paced digital learning. Digital instruction replaces enough of top teachers' time that they can teach more students, using face-to-face teaching time for higher-order learning and personalized follow-up. Teachers can use part of their freed time for planning and collaboration.



REMOTE TEACHING

Schools without enough excellent teachers can enlist accountable remote teachers down the street or across the nation. Remote teachers use technology to provide live, but not in-person, instruction, while on-site teammates manage administrative duties and develop the whole child.

BOUNDLESS REACH

In the school models described here, teachers extend their reach to more students while remaining accountable for individual students' learning. Teachers may also take on roles in which thousands or even millions of students benefit. For example, teachers can:

- create video lessons
- help design learning software
- develop curricula and assessments

If these activities generate revenue, they can provide another way for excellent teachers to earn more by reaching larger numbers of students. But teachers in these roles do not interact directly with students and are not accountable for outcomes of individual students using their tools. So students still need an excellent teacher who teaches live and is fully accountable for learning in each subject.

HOW REACH MODELS CAN GENERATE SAVINGS FOR HIGHER PAY AND OTHER PRIORITIES

Each model produces potential **savings** while requiring **costs** that only partially reduce those savings. In practice, the net savings available to pay teachers more and fund other priorities will differ by school model, local wage differentials between teachers and other school staff, and the specific staffing and technology decisions that school design teams make. In some models, some potential savings and costs are optional, while others are inherent in the model. The detailed model descriptions explain the options for each model.

In addition to choosing school models, design teams of teachers and leaders will have to make choices about the **speed of transition**, based on the urgency of student learning needs, school values, and financial realities. Faster implementation in an existing school can free funds more quickly, but may increase transitional costs, described below.

Summary of Savings and Costs When Extending Excellent Teachers' Reach

The ways that various reach models produce financial savings or increase funding include:

- * Allowing teachers who are the most consistently excellent to reach more students
- * Swapping teacher time with digital instruction, in age-appropriate quantities for students

- * Paying less for teacher roles with lighter workloads—fewer students, less responsibility, or shorter hours, such as 40-hour weeks—than for teaching positions that typically require workweeks over 50 hours¹
- * Increasing class sizes (by choice and within reason)
- * Shifting non-classroom instructional specialists back into classrooms, when not needed to achieve excellent outcomes
- * Reducing construction costs in new schools by having fewer, larger rooms for digital labs or combined digital/face-to-face classrooms

Costs may be incurred by:

- * Adding paraprofessional roles to support reach, such as digital lab monitors, assistant teachers, learning coaches, and tutors²
- * Purchasing technology—digital-learning software, hardware, and Internet connections; webcams and online whiteboards for remotely located teaching; and time-saving technology tools
- * Making facilities and furniture changes in existing schools
- * Transitioning pay discrepancies—tenured and contract-protected teachers who do not either continue as full classroom teachers or take reach-extended roles may need to be paid above the value of their new positions. Slower transition to reach models can avoid this cost and leave most good, solid teachers in traditional roles.
- * Obtaining design assistance to choose and tailor reach models

More Detail

Here we provide more detail about each of these methods of saving funds while reaching more students with excellent teaching, and the costs that partially offset these savings.

The basic ways schools can generate additional funds or savings include:

- * **Allowing teachers who are the most consistently excellent to reach more students with whom they are likely to continue achieving excellent outcomes.** This is the fundamental way that funding from existing per-pupil streams is freed.
- * **Swapping face-to-face teacher instruction with digital instruction, in age-appropriate quantities for students.** Teachers may replace approximately 20 percent to 50 percent of face-to-face instructional time with digital instruction, depending on student ages, other student needs, and the quality of available digital instruction. As noted below, this saves money because the paraprofessionals who supervise this time have lower wage rates than teachers. For example: Students at both the elementary and secondary levels can spend as little as about one hour daily learning digitally. This allows



$$\text{A Teacher's Impact} = \text{Student Outcomes} \times \text{Number of Students Reached}$$

excellent elementary math/science teachers to teach three or four classes of students, and the best secondary math and science teachers to teach 50 percent more students—for more pay, without increasing class sizes, and gaining several hours of planning time weekly. Two notes may be helpful: First, “digital lab time” need not all be spent in front of a computer screen. Labs may also have space and tables for small-group tutoring and student project work. Second, higher amounts of digital learning time allow more teachers to reach more students, but should be limited to levels that produce excellent learning outcomes and allow development of the whole child.

- * **Paying less for teaching roles with lighter workloads** (shorter hours, less responsibility, or fewer students). Some models allow some teachers to have fewer students (Class-Size Shifting) or shorter hours than people in lead teaching positions (which today typically require workweeks over 50 hours¹). For example, Multi-Classroom Leadership allows some team teachers to focus on work that may be done in a shorter workweek, such as teaching small groups of students, grading, and providing feedback to students. Some of these team teachers may be early-career teachers learning the craft who would choose to work more hours to learn and develop their skills, but they also typically have lower pay rates.
- * **Increasing class sizes, by choice and within reason.** Schools, or their districts or charter organizations, typically receive some portion of funding on a per-pupil basis. When some or all of a school’s teachers teach larger classes, requiring fewer teachers overall, funds are freed for higher pay and other priorities. With a simple Class-Size Increase model, schools can increase the class sizes of select teachers, perhaps recruiting and developing more teachers over time who are committed to this model. Alternatively, some teachers can take smaller classes with commensurately lower pay. If school funding is need-based—meaning students who require more time and resources are funded at a higher level—teachers also may be rewarded for teaching students who require more time, balancing reach with the challenges of teaching different student populations. Note: Some models, such as Time-Technology Swaps, actually allow increased student reach with *smaller* class sizes, if desired.

- * **Shifting non-classroom instructional specialists back into classrooms.** When excellent teachers reach more students successfully, fewer students may need specialists who supplement in-class differentiation. In schools where specialists are chosen for their teaching prowess, those specialists could return to direct responsibility for students in new roles that allow career advancement and pay increases. This saves funds by avoiding an additional hire when an excellent teacher working outside the classroom as a specialist is already available in the school and can move into a direct teaching role.
- * **Reducing construction costs in new schools** by having fewer, larger rooms for digital labs or combined digital/face-to-face classrooms. This savings is realized most prominently in Time-Technology Swaps.

Costs that may offset savings include:

- * **Adding paraprofessional roles to support reach.** These positions include digital lab monitors, assistant teachers, tutors, and learning coaches. People in these crucial jobs save excellent teachers enough time that the teachers can reach more students. They can play critical roles, such as supervising students during digital lab time, taking care of elementary students during unstructured time and transitions, taking care of students on-site when subject teachers are remotely located, or completing administrative tasks and paperwork. Because people in these roles do not need the high levels of combined academic, planning, and classroom management skills that full teachers need, these positions pay less. But they also have shorter workweeks of about 40 hours (in contrast, traditional teachers report working over 50 hours weekly on average).³
- * **Purchasing technology.** Digital-learning software, hardware, and Internet connections all cost money, although a growing range of free online resources is available. Remotely located teachers need webcams and online whiteboards, and their students need computers or large screens in classrooms. Time-saving technology tools, such as student-data analysis and grouping tools, course planning software, and class communication websites, can reduce teacher time spent on non-instructional tasks, making extended reach more feasible in any school model. Most of these must be purchased.
- * **Making facilities and furniture changes in existing schools.** Schools may find that classrooms need to be altered to incorporate digital labs in existing school buildings, requiring the removal of walls and installation of electrical, cable, and wireless connection gear. Some schools may need new furniture as well, such as computer- and project-friendly tables.
- * **Transitioning pay discrepancies.** Schools may choose to transition to reach models as natural attrition occurs. But others

may choose to make faster transitions in which current teachers change roles. Tenured and contract-protected teachers who do not either continue as full classroom teachers or take reach-extended roles may need to be paid above the going rate of their new positions. Although this cost is transitional and temporary, it may be the most significant cost of reach extension for some schools. When financially viable, with public or private philanthropic funding, bearing this cost will make reach fairer and more palatable to those who entered the profession with different expectations. A slower transition to reach models within each school can avoid this cost, allowing solid teachers who choose to stay in traditional roles to continue doing their good work, but may reduce the benefit to current students.

* **Obtaining design assistance.** Some schools and districts may need design and facilitation assistance to choose and tailor reach models. This temporary cost may be funded by allocating reach-model savings over a number of years or by obtaining special, temporary grants. See <http://opportunityculture.org/reach/> for links to detailed school models and implementation tools that may help reduce or eliminate this cost in some locations.

Finally, **benefits costs may increase or decrease the savings—and teacher pay boosts**—both in absolute terms and as a percentage of wages and salaries. We do not present benefit effects here, as the permutations in different schools are too numerous for this summary. School and district financial officers will need to be mindful of benefits when calculating and reallocating the savings. Reallocating savings to pay increases and to new spending on other priorities may have different effects on benefits costs. For example: Paraprofessional benefits during employment may be a higher percentage of wages than benefits for professionals, reducing savings somewhat. Alternatively, reducing the number of positions, such as non-classroom specialist reductions when reaching more students with highly effective classroom teachers, will in most cases further add to savings—increasing funds to pay classroom teachers more.

In all the reach models, net savings are possible. How to spend the savings is a question for excellent teachers and school and district leaders.

HOW SCHOOLS CAN USE SAVINGS—INCLUDING PAYING TEACHERS MORE

All of the reach models free funds, and many can free teachers' time, too. School design teams composed of teachers and school-wide or district-wide leaders must choose how to reinvest that money and time.

In addition to paying great teachers more for their expanded impact, freed time and funds can be used for nearly any school priority that requires time and money. In some cases, especially by combining reach models, schools can pay *all* teachers more within budget.

Schools and districts could also:

* **Increase leadership by funding excellent teachers' time:**

- To develop, lead, train, and evaluate other teachers and staff
- To develop rubrics and routines that allow developing teachers and staff to take on more of the excellent teachers' duties while maintaining excellent student outcomes for all students
- To help school leaders determine the best **career paths** for developing teachers

* **Increase development and collaboration of all teachers by funding time:**

- To collaborate with teammates in the models built around teams—specialization, time-technology swaps, multi-classroom leadership, and remote teaching
- To develop skills needed for excellence in every role and for career advancement

* **Increase learning personalization and enrichment by funding time and talent:**

- To add instructional time to students' days or school year
- To reduce instructional group sizes
- To provide more small-group and individual instruction, by teachers or tutors
- To spend more time on enriched instruction and higher-order thinking skills
- To increase the planning time needed to handle a greater student load

In an **Opportunity Culture**, all teachers have career opportunities dependent upon their excellence, leadership, and student impact. Advancement allows more pay and greater reach.



The benefits of reach extension to teachers are not all financial. Some models allow schools to increase **job flexibility and provide part-time work**, which may retain excellent, experienced teachers who would otherwise exit the profession during various stages of their careers. (See more on OpportunityCulture.org at <http://opportunityculture.org/teachers-time/>.)

Using models of reach extension, schools can make all of these changes without taking excellent teachers out of instructional roles. Some of the financial and time benefits can accrue to all teachers, not just excellent ones, depending on each school community's goals and values.

Of course, for many teachers, the chances to pursue teaching excellence, impact more students, and help peers succeed are the best benefits of an Opportunity Culture.

Visit OpportunityCulture.org for more details on reach models and their implications for teacher pay and school budgets.

OTHER RESOURCES

Additional resources for reallocating spending to support better student learning include the following:

Education Resource Strategies (ERS) is a nonprofit organization dedicated to helping urban school systems organize talent, time, and money to create great schools at scale. Learn more about how to reallocate resources to support strategic school designs that extend teacher reach on their website: <http://erstrategies.org/focus/transformation>.

The Center on Reinventing Public Education has published numerous reports about public school spending and has a web page devoted to finance, spending, and productivity: <http://www.crpe.org/finance-and-productivity>.

Notes

1. Classroom teachers in the traditional model report working 51 to 54 hours per week. See National Center for Education Statistics, *2007–08 Schools and Staffing Survey*, table 6, http://nces.ed.gov/pubst2009/2009324/tables/sasso708_2009324_t12n_o6.asp#f2
2. Schools may be able to staff some tutor positions with screened volunteers who have the required content knowledge.
3. Costs added by digital lab monitors will depend on the adult-to-student ratios in digital labs. Digital labs may have more students per adult than classrooms. Students typically would be engaged in individualized digital instruction or project work. One high-value use of adult volunteer time is helping with student questions and supervision in digital labs.

THE REACH EXTENSION PRINCIPLES

1. **Reach more children successfully** with excellent teachers.
2. **Pay excellent teachers more** for reaching more children successfully.
3. **Achieve permanent financial sustainability**, keeping post-transition costs within the budgets available from regular per-pupil funding sources.
4. **Include roles for other educators** that enable solid performers both to learn from excellent peers and to contribute to excellent outcomes for children.
5. **Identify the adult who is accountable for each student's outcomes**, and clarify what people, technology, and other resources (s)he is empowered to choose and manage.



Savings and Costs of Reaching More Students With Excellent Teachers

<i>Ways to Extend Reach</i> →	Class-Size Changes	Elementary Subject Specialization	Multi-Classroom Leadership	Time-Technology Swaps	Remote Teaching with Time-Tech Swap
FUNDING/SAVINGS FROM REACH ↓					
Reach more students to free per-pupil funds	✓	✓	✓	✓	✓
Swap teacher time for digital time				✓	✓
Pay less for lighter-workload teaching roles	✓		✓		
Increase some class sizes (by choice, within reason)	✓				
Shift specialists into classrooms	✓	✓	✓	✓	✓
Reduce new construction costs				✓	✓
COSTS OF REACH ↓					
Add support paraprofessionals	*	✓	✓	✓	✓
Purchase technology				✓	✓
Make facilities/furniture changes				✓	✓
Transitioning pay discrepancies**					

*Class-size changes do not require any additional costs. Schools, however, could choose to support teachers who take on particularly large classes by providing additional paraprofessional support.

**This cost depends on a school's speed and method of transition, not the reach model.

Potential Pay Increase Percentages Available to Excellent Teachers in Three Reach Models

<i>Ways to Extend Reach</i> →	Elementary Subject Specialization	Multi-Classroom Leadership	Time-Technology Swap—Rotation
	<i>Classroom Specialist Can Earn:</i>	<i>Teacher-Leader Can Earn:</i>	<i>Blended-Learning Teacher Can Earn:</i>
With Low Starting Percentage of Non-Classroom Specialists	22%–31% More	67%–97% More	23%–27% More
With High Starting Percentage of Non-Classroom Specialists	33%–43% More	104%–134% More	36%–41% More
When Also Paying Team Teachers up to 25% More	N/A	Up to 79% More	N/A
When Also Paying Team Teachers up to 10% More	N/A	Up to 109% More	N/A

Note 1. Figures expressed as “percentage more than average pay.” Schools save more when starting with higher percentages of non-classroom specialists, because savings are higher per class as these teachers’ positions are shifted back into classroom roles.

Note 2. Some portion of savings may be reallocated to all teaching staff or other priorities, not just excellent teachers. We present two example figures in the Multi-Classroom Leadership column when paying team teachers 10% and 25% more than average, which are modeled in the companion brief listed below.

Note 3. See the following briefs for detailed calculations and multiple scenarios of net savings and pay increase potential, including data sources, at <http://opportunityculture.org/reach/pay-teachers-more>: *Financial Planning for Elementary Subject Specialization*, *Financial Planning for Multi-Classroom Leadership*, and *Financial Planning for Time-Technology Swap—Rotation Model*.

APPENDIX: MODEL OVERVIEW TABLE



Where is the Excellent Teacher?

In-Person

The teacher accountable for learning is in the school, teaching face to face, and may lead others.

Remote

The teacher accountable for learning uses technology to teach and connect with students, and may lead others. An in-person monitor is required.

CLASS-SIZE CHANGES

Excellent teachers teach larger classes, within limits and by choice.

Class-Size Increases | Class-Size Shifting

Class-Size Increases | Class-Size Shifting

SPECIALIZATION

Excellent teachers specialize in high-priority subjects and roles.

Subject Specialization | Role Specialization

Subject Specialization | Role Specialization

MULTI-CLASSROOM LEADERSHIP

School-based or remote instructional teams report to an excellent teacher.

Multi-Classroom Leadership
(In-Person Pods)

Multi-Teacher Leadership
(Remote Pods)

TIME-TECHNOLOGY SWAPS

Digital instruction replaces enough top-teacher time that they can teach more students. Students have digital instruction for 25% or more of learning time.

In-Person Swaps

Rotation* Alternating digital instruction and in-person teacher on a fixed schedule

Flex* Digital, small-group, and large-group learning time individualized

Remote Swaps

Rotation* Alternating digital instruction and remote teacher on a fixed schedule

Flex* Digital, small-group, and large-group learning time individualized

LIKELY COMBINATIONS

- * Any of the models combined with **Homework Flipping**, **Specialization** or **Multi-Classroom Leadership**
- * Schools committed to reaching every student in every valued subject with the excellent teachers will use **Multi-Combinations**

Note: Shaded items may require new technology. Students are in school buildings in all models in this table.

*The terms Rotation and Flex are widely used to describe “blended learning” models. See *Innosight Institute’s The Rise of K-12 Blended Learning*.

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