

# Rock, Water, and Pebble

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THREE STRATEGIES FOR SCALING  
INNOVATIONS IN EDUCATION

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# Design Elements of a School

(one way to organize them)



## Governance/Leadership

State Board  
State Dept. of Education  
District/School Board  
District Central Office  
Teacher/Labor Leadership  
Parent/Student Leadership  
School Leadership - Principal, Assistant Principal, Deans, Grade Level Chairs, etc.

## UNIFYING EDUCATION MISSION/VISION/VALUES

What is taught, how it is taught and experienced, how it is supported, how it is assessed, what relationships look like, and ultimately how a school provides an environment that successfully prepares all students to thrive in and contribute to a diverse, equitable, and inclusive society

### School Structure

# of grades, students per grade  
School day/week/year  
Day schedule, blocks  
Student/teacher ratio

### School Relationships

Leadership/staff relationships  
Staff/student relationships  
School/parent relationships

### School Culture

Philosophy and values  
Social-emotional supports  
Classroom management  
Student conduct management

### Teachers, Students, and Parents as Co-Designers and Education Partners

### Culturally Affirming Pedagogy, Well-Being, and Identity Development

### Teacher/Talent

Talent recruitment and onboarding  
Ongoing professional development  
Planning time (individual, group)  
Supports to enable focus on teaching  
Observation/coaching  
Reviews/assessments  
Career pathways  
Compensation/benefits

### Aligned Academics

CONTENT  
Standards  
Curriculum  
Unit plans  
ASSESSMENT  
Formative assessments  
Project/portfolio assessments  
Summative assessments

### Differentiation

Individualized learning roadmaps  
Personalized/adaptive learning modes  
Learning recovery programming  
Special education programming  
English language learner programming  
Accelerated programming

### Academic Data Systems

Assessment administration and analysis  
Student information systems

### Post K-12 Success

To and through postsecondary supports  
Connection to careers/professions/vocations

### Experiential and Enrichment

Experiential, project-based learning  
Enrichment programming (arts, music)  
Physical health / sports programming  
Vocational, skill-specific programming

## Finance, Facilities, HR, and Operations

Budgeting

Financial management

Human resources

Information technology

Facilities management

Procurement/contracting

Transportation

Food services

Health services

Safety

## External Relationships

Alumni

Community

Business

Private philanthropy

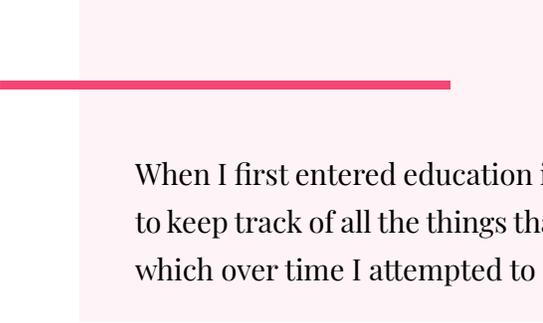
Municipal government

## Structural

Funding flows, formulas, and requirements

Federal, state and district policies, procedures, and reporting

Organized labor and collective bargaining agreements



When I first entered education in 2004 as a consultant (and with no teaching experience), I tried to keep track of all the things that happen in a K-12 school. It is a dizzying list of design elements, which over time I attempted to map out on a PowerPoint slide (see previous page).

Building and sustaining an excellent school is like asking an orchestra to perform the 1812 Overture while also playing full-contact rugby – for at least 180 days of the year, every year – and with musicians/players regularly being replaced. And that’s all before schools had to manage the complexity of operating during a pandemic.

To be excellent, a school must excel in nearly all of these design elements simultaneously. And it doesn’t stop there. Not only must a school be excellent in these design elements, but each element must be aligned and integrated with each other to work well. The impact of an excellent curriculum can be limited if the curriculum doesn’t line up with assessments, teacher professional development, or school operations (as it turns out, it’s challenging to teach a curriculum if buses break down). To quote the wisdom of Lauryn Hill, sometimes, *“Everything is Everything.”* It’s incredibly complex and pretty daunting to get it all right for any student. It’s also even more difficult – yet absolutely essential – to get it right for every student, requiring schools and those of us supporting them to focus continuously on equity so that each design element in these complex organizations works for all and not just for some.

The complexity of schools – and therefore the complexity of changing them – has big implications for how we introduce and implement new innovations into school systems. If we think of education systems as geological formations, there are three strategies for scaling innovations: the Rock Strategy, the Water Strategy, and the Pebble Strategy.

### **BUILD YOUR OWN SCHOOL DESIGN FRAMEWORK**

This framework is not meant to be authoritative, and I encourage organizations to build their own (and remember – it’s not a small font; it’s an efficient use of space).

You might organize these design elements with different groupings or less detail or even more detail in some categories. You could also organize it by stakeholder.

The key is to have something that your organization can use as a common language to drive dialogue and decisions on design.

These three strategies are distinct, but all have value. Education leaders seeking to scale innovations may begin with a focus on one strategy, which is natural. However, there are opportunities for leaders to unlock greater impact by considering a combination or sequencing of all three.

## **Rock Strategy: Controlling All the Design Elements of a School**

In the Rock Strategy, an organization controls many if not all of these school design elements and how they align and work together. As the writer Stan Lee counsels, *“with great power comes great responsibility,”* and ownership of all the design elements of a school comes with accountability for the performance of that school.

Under the pressure of performance (most rocks form in nature because of pressure), a whole school model becomes a ‘rock’ with significant strength and structural integrity, assuming a school is executing these design elements well and in a coordinated way.

This is one of the reasons why some education leaders turn towards the governance model of public charter schools. Charter operators can often design and manage a school with control over most, if not all, of these design elements.

A number of charter schools have been effective at developing models with transformational results. Their autonomy allows them to forge a strong, comprehensive school solution, and accountability for results provides the pressure to test if that solution can deliver student outcomes.

John Alford, Chief Network Growth Officer for the national [Knowledge Is Power Program](#)<sup>1</sup> (KIPP) network of charter public schools, made the following observation: *“It’s always been important that we have the autonomy and control required to successfully operate the KIPP model in our schools. If we did not have control over all elements of our model, whether it’s the extended school day and year or our emphasis on character development, we would not have had the success we’ve had in so many communities across the country.”*

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The challenge of the Rock Strategy is that the geological formations of some education systems do not have all that many open spaces into which a new rock can easily fit.

Sometimes, “Rock Strategists” have to force their way in, chipping away at an existing system and creating significant friction – and they may not ultimately be successful in creating an opening for a new rock.

The Rock Strategy can be an incredibly effective way to drive innovation and impact, and to prove what’s possible at the scale of a school or school system. But it is also not the only option.

### **Water Strategy: Prioritizing Certain Design Elements of a School Based on Deep Expertise**

Water has the opposite structural integrity of rocks. It is able to flow into a geological system wherever there are openings without causing immediate friction. Water is incredibly adaptive to existing structures.

In the Water Strategy, education leaders prioritize one or a few of these design elements in which they have strong expertise, create targeted innovations, and allow these innovations to flow into education systems wherever they are invited. Most “Water Strategists” have a point of view about how most if not all school design elements should work (and work together), but the innovations they spread are more narrowly focused and in response to the needs of the schools with which they work.

An example of this strategy is Providence-based [Highlander Institute](#) <sup>2</sup>, which partners with schools and communities to create more effective and equitable learning environments. Dana Borrelli-Murray, Highlander’s Executive Director, explains how they work: *“We start by meeting with our school partners to build a shared understanding of what their needs are. Our support to schools is not about our agenda; it’s about their agenda, and how we can support that. We help them fill gaps necessary to ensure student success by bringing our suite of proven strategies and new ideas and concepts centered on community.”*

The benefits and challenges of the Water Strategy are the opposite of the rock. By filling gaps within the system, the Water Strategy can have greater and more rapid reach and can create more breadth of impact.

Conversely, a Water Strategy can sometimes be limited in its depth and degree of impact. A Water Strategist could offer fantastic teacher professional development, but it might have limited short-term influence on other design elements like curriculum, student assessment, teacher assessment, or structure of the school day that can magnify or limit the impact of great teacher PD.

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However, while Water Strategies may focus on a narrower scope, they often have very strong design rigor within that scope. For example, [Saga Education](#)<sup>3</sup> provides intensive, high-impact math tutoring during the regular school day. It aligns with the scope and sequence of what is being taught in the math classroom to enable coordination. It has deep experience in how to hire, train, and manage tutors. Yet Saga's focus allows it to easily embed within existing school designs.

It is also important to acknowledge that most district schools themselves have limited direct control over their design elements. These schools may be accountable for the performance of every design element in the framework, but they lack the autonomy to control many of them. For many of these schools, the ONLY way to innovate in the short-term is through pursuing Water Strategies – independently or with partners.

### **Pebble Strategy: Starting with a Small Unit of Change Tied to a Larger Vision**

A middle ground between the Rock Strategy and the Water Strategy is the Pebble Strategy. The Pebble Strategy benefits from the structural integrity of the rock (i.e., autonomy over most or all design elements), but has the advantage of being small enough to fit into many more open spaces in the geological strata of an education system with little friction.

Pebble Strategies have taken on even more importance during the COVID pandemic because they are essentially micro-schools, which are rapidly proliferating and will be an enduring education option for some communities post-COVID.

An example of the Pebble Strategy is [Wildflower Schools](#)<sup>4</sup>, a network of Montessori schools serving approximately 25 students per school in three-year age bands (such as ages three–six or six–nine). Each Wildflower school has only one to two classrooms with two teachers each. Their size allows them to operate out of an open storefront (think Starbucks). Wildflower schools may operate as nonprofit childcare centers, private schools, or micro–charters, and all support intentional economic diversity of their student body.

Matt Kramer, CEO of The Wildflower Foundation, made this observation: *“Wildflower schools start small and stay small, so that each one can reflect the individuality of its two teacher social entrepreneurs and the uniqueness of the surrounding community, and their children and families. Some schools offer dual language immersion. Others work closely with community–based organizations. Others focus on serving a cultural community. When the needs of the teachers and families change, the schools change too, without the teachers needing the approval of any administrators or outside authorities.”*

While each Wildflower school has significant autonomy, they all follow [nine core organizing principles](#)<sup>5</sup> and must meet certain organizational, philosophical, and quality criteria to be in the network. To enable this, Wildflower offers teachers a variety of technological tools, how–to guides, technical assistance, and a community of peer support and accountability.

A Pebble Strategy may be about starting with small units of change, but that does not preclude a vision for achieving a larger level of systemic change.

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In reflecting on the potential of the Pebble Strategy, Kramer noted: *“Like wildflowers, our schools remain small, but every flower creates many seeds. With water, sunshine, wind and time, flowers spread across a meadow. Only a century ago, 250,000 one–room–schools were the predominant mechanism for educating children in America. Those schools were consolidated in search of operational efficiencies that never materialized and to ensure every child’s access to expertise. Since modern technology can*

*provide that access in other ways, I expect to see more and more educators and families seeking to escape from institutional schools and find a new way of being and learning together that is organized on a human scale.”*

## **Playing in More Than One Strategy: The Beach**

While these strategies are distinct, education leaders are not precluded from employing multiple strategies, and increasingly more are doing just that.

More Rock Strategists are thinking about how they take one or a few design elements of their model and additionally adopt more of a Water Strategy to allow their impact to flow to many more educators, schools, and communities.

For example, KIPP has packaged its ‘to and through college and career’ programming and delivered it in [partnership with San Antonio Independent School District](#)<sup>6</sup>, and is now sharing its College and Career Match Playbook and other key resources nationally to partner charter and district schools.

A number of other charters have made the same commitment to dual (but not dueling) strategies that leverages their experience in operating whole school models.

[Achievement First](#)<sup>7</sup> has created an [open-source platform](#)<sup>8</sup> to share its strongest resources and curriculum, and a more intensive [set of coaching supports](#)<sup>9</sup> – for school partners who want assistance in implementing their curriculum. [Valor Collegiate](#)<sup>10</sup> has codified its strong social-emotional learning (SEL) approach into [Powered by Compass](#)<sup>11</sup>, which intensively trains schools across the country on how to adopt the Valor SEL model.

[Match Education](#)<sup>12</sup> has built [Match Schoolhouse](#)<sup>13</sup>, a digital teacher PD platform, and has spun out [Fishtank Learning](#)<sup>14</sup> to share its curriculum and instructional resources for other schools to use. Nnenna Ude, President and CEO of Match Education, explained: *“In addition to serving our Match preK–12 students and [Sposato](#)<sup>15</sup> teacher trainees, we also see it as our duty to reach beyond the limits of our walls and provide value to as many students, teachers, and communities as possible.”*

None of these efforts compromise the Rock Strategy’s core mission. Rather, they are complements, as the act of codifying to share with others inherently increases the rigor of using the content internally, and forges stronger common ground between charter and district educators.

Coming at this from the other direction, more Water Strategists are finding that once they have ‘filled’ a need for a school on a specific design element, they then have a position of trust, credibility, and insight to add to what they initially offer, building up a ‘sediment’ of structure and alignment over time – and at a pace of change that is more embraceable by many schools.

Dana Borrelli-Murray from Highlander shared how this plays out: *“Building a trusted relationship with our partners and creating value for them leads to deeper collaborations. We work together to identify where they can build a more ambitious agenda for transformation and where we then have an opportunity to partner more deeply to help them achieve it.”*

Returning to Saga Education, while their immediate programmatic focus is on math tutoring, their hope is that once schools see the power of personalized, relationship-driven tutoring, this model will expand in age and subject, and eventually become the permeating philosophy in a school to drive student success.

The Pebble Strategists, like Rock Strategists, may also identify specific design elements they want to share widely via a Water Strategy.

Alternatively, Pebble Strategists – as they grow in number – may also find benefits from becoming more rock-like, leveraging resources and economies of scale. This also may allow some of them to offer wider programming that requires a larger base size of students (think sports).

Further, because of their ability to have significant control of a school’s design elements but within a small unit of students, we may also see more Pebble Strategies find their home within the rocks of existing large schools as ‘schools-within-schools’ that can proliferate choice within the existing geology of education systems.

Additionally, because of COVID, I anticipate that we will see a proliferation of Pebble Strategies – either as individual micro-schools, or increasingly networks sharing resources and perhaps even committing to ‘loose federations’ or ‘tight franchises’ like we see in the charter world.

## **Who is Guiding Our Path On the Beach?**

As I have [written previously](#)<sup>16</sup>, I believe that creating enduring, equitable change in education systems at scale requires many of us to change our mindsets towards and relationships with the

communities we serve. We should recognize and embrace the power that local stakeholders – parents, students, and teachers – have in shaping the agenda for change and in identifying what innovation should look like for their community.

In the urgency of the moment that we face around COVID, we will all feel the natural pressure to make changes quickly. Yet if we want these changes to be successful and sustainable, it is essential that the stakeholders we serve be at the table with us in designing and implementing those changes.

History is usually not kind to institutions that seek to scale on shaky foundations, and there is an opportunity in the wake of COVID to design new education innovations that build a much stronger foundation grounded in a focus on equity and the strength of a community's vision for what school and student success look like. As discussed in a [recent essay on the Arab-Israeli town of Umm al-Fahm](#)<sup>17</sup>, parents and communities can and will build together with education systems – but those systems have to respect and recognize parents as partners who play an essential role in determining what gets built.

## **Conclusion**

I recognize that at some level, all three of these education innovation strategies will feel controversial to some, as will the question of who owns the decision about what these innovations should look like.

Whole school 'rocks' – be it charter schools or new district schools – can be a big lift (pun intended) for a system. Introducing targeted changes into existing systems can feel slow even as they are creating meaningful change within schools and districts. Micro-schools excite many and make others nervous.

However, I hope we have the will to put such concerns aside.

We are in a time of urgent education need and severe education inequity. COVID is only exacerbating the underlying struggle to educate millions of students that predates the pandemic.

To address this inequity at scale – for the first time – isn't an 'either/or' situation.

Rather, it's going to require 'all of the above' – whole school models continuing to grow, flexibility to provide targeted programming that flows into schools where needed, and small schools that allow for nimbleness.

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I WELCOME YOUR THOUGHTS AND PERSPECTIVES.

PLEASE REACH OUT TO ME  
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## Notes

1. <https://www.kipp.org/>
2. <https://highlanderinstitute.org/>
3. <https://www.sagaeducation.org/>
4. <https://wildflowerschools.org/>
5. <https://wildflower.papyrs.com/The-Nine-Principles>
6. <https://www.the74million.org/article/charters-and-district-schools-share-strategies-on-getting-low-income-students-through-college-putting-uneasiness-aside/>
7. <https://www.achievementfirst.org/>
8. <https://www.achievementfirst.org/opensource/>
9. <https://www.achievementfirst.org/how-we-work/afaccelerate/navigator/>
10. <https://valorcollegiate.org/>
11. <https://poweredbycompass.org/>
12. <https://www.matcheducation.org/>
13. <https://www.matcheschoolhouse.org/>
14. <https://www.fishtanklearning.org/>
15. <https://www.sposatogse.org/>
16. <https://bit.ly/3gaJhZE>
17. <https://www.newprofit.org/go/picket-signs-and-shovels/>



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