

KnowledgeWorks Forecast 4.0

Shaping the Future of Learning: **K-12 School-Based Education Strategy Workbook**



Shaping the Future of Learning

The way we work, teach, live and learn is changing at an exponential rate. Educators must consider how their practices today will shape the future of learning tomorrow – and what roles students and communities might have in shaping that future, too. Alongside digital technologies, new social norms, organizational approaches and economic models are ushering in a future that could look dramatically different from today's realities.

In our most recent future forecast, *Forecast 4.0: Education in the Era of Partners in Code*, KnowledgeWorks explores many possible futures in which we can expect to have new uses for and new relationships with machines that are increasingly wearable, connected and smart. These futures could change both the world we hope to prepare learners for and the approaches that today's K-12 schools and other learning providers use.

These futures won't wait for us to be ready. We need to plan now to ensure that we're ready to help learners navigate a complex and rapidly changing landscape. By being proactive about what the students of tomorrow will need, educators can better serve today's students, too.

This workbook, designed for leaders and innovators in K-12 school-based education, can help you consider the opportunities on the horizon for learning, begin to identify ways to take advantage of



emerging trends and make bold choices to lead the way toward a future of learning that serves all learners and society well. Read, share and interact with this workbook to uncover:

- Five **opportunities to lead** the future of learning as we look ahead ten years
- Strategies for **taking action** to address critical areas of change
- Examples of **work being done today** by education innovators
- Key questions to help you consider how you and others might **respond to opportunities** and challenges on the horizon.

Opportunities to Lead the Future of Learning

In the spring of 2016, KnowledgeWorks convened more than 60 educators in workshops exploring K-12 school-based education, informal and community learning organizations such as libraries and museums, and higher education. Over the course of two days, workshop participants reflected on the challenges and opportunities facing their education sector, drawing on their own experiences and ideas raised by KnowledgeWorks' ten-year forecast, *The Future of Learning: Education in an Era of Partners in Code*.

In responding to these areas of opportunity, K-12 school-based educators, administrators and policy makers have the opportunity to address unique challenges relating to student needs, equity, regulatory requirements and funding while building upon K-12 schools' current leadership in personalized learning.

For the full range of insights from these workshops, see *Shaping the Future of Learning: A Strategy Guide*.

Critical Areas of Opportunity

Five critical areas of opportunity were drawn from workshop participants' insights:



360 Degree Learners:

How can we **educate the whole person** and enable lifelong learning that supports academic and social-emotional growth?



The Whole, and the Sum of Its Parts:

How can we **personalize learning in community**, reorienting education around learners while strengthening society?



Elastic Structures:

How can we **create flexible approaches to learning and coordination** that respond to learners' needs?



Innovation with Intent:

How can we **ground systems change in equity**, including and supporting underserved learners?



The New A+:

How can we **renegotiate definitions of success**, examining what education systems aim to achieve and who gets to say?



This workbook is designed to invite you into the conversation and digs a little deeper into what these critical areas of opportunity really mean for learning ten years from now. In addition to sharing clear guidelines for how the work you do today has the potential to make an impact on the future, it highlights the experiences of several workshop participants – including their perspectives on these foundational issues and their efforts to influence change toward the future of learning in their current day-to-day work.

As you explore these opportunities for yourself, keep in mind that every organization has different goals, needs and available resources. As such, some strategies might seem more appropriate

than others and the tactics that work in service of those strategies will vary. You might also identify additional or different ways of responding to the opportunities explored here.

Many of the education leaders who participated in our workshops found that giving themselves the space to think about the future led them to the realizations that taking even small steps today can have a large impact and that considering the future of education is essential to doing their best work today.

Now, we invite you to do the same.

Looking Ahead to 2025

KnowledgeWorks Forecast 4.0

The Future of Learning: Education in the Era of Partners in Code

Can you imagine what living, working and learning might look like in ten years' time? *The Future of Learning: Education in the Era of Partners in Code*, explores five major societal shifts that we invite you to consider:

Current notions of college and career readiness could be redefined as artificial intelligence and machine learning displace or change many middle-class jobs and more full-time jobs get broken down into discrete tasks. In this future, what will it mean to be career-ready, and what will the role of education be?

People increasingly expect customized experiences, including how they work, where they shop and where and when they choose to learn. As students and their families seek out educational approaches and careers that fit their values, interests and lifestyles, how will established approaches to education and funding need to adapt?



New, flexible approaches to organizing work and making decisions are changing the future of work, reshaping economic approaches and creating a culture of greater transparency. These approaches could do the same for education institutions. What if school formats were more fluid, relying less on traditional administrative structures and more on network- and relationship-based structures focused on learners' needs, interests and goals?



Individuals increasingly aspire to optimize themselves and their performance and will have more tools available to do so. The spread of wearable devices and technologies such as virtual and augmented reality, paired with a deeper cultural understanding of the importance of social-emotional health and development, could lead to a greater individualization of education. Could these tools and practices, along with more individual student data, help educators design more responsive learning experiences?

The changes will keep coming. With the coming changes in work, disruptions to local economies, increased environmental volatility and new challenges that impact individuals and communities, funding for public infrastructures, including public schools, could

decline and new educational needs could emerge. Schools will have new opportunities and new demands to personalize learning in response to both individuals' needs and the needs of their communities. Where might there be opportunities to partner across sectors to create solutions, cultivate students' understanding of their own impact and build resilience in the face of turbulence?



To dig deeper, download **The Future of Learning: Education in the Era of Partners in Code**



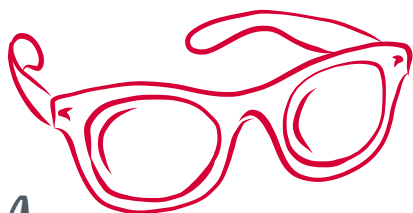
Educating the Whole Person

Future Need

Today, society generally imagines a “learner” as a young person engaged in academic pursuit. But this definition can be limiting as we move toward a future in which a growing population of students seeks flexible, meaningful learning experiences that may not fit within traditional classrooms and as we place more value on social-emotional development and interest-based learning. Academics are just one piece of the puzzle. A successful student is one who feels safe, comfortable and ready to learn. Meeting the needs of every student will require learning experiences that emphasize many aspects of development across every life stage, connected through interpersonal relationships and supported by technology.

⑤ Educating the Whole Person

Strategies for Today



Use a Learner Lens

Student voice is often lost when big decisions about education are made. Considering learners' points of view when evaluating potential changes, ideas, and solutions can help education stakeholders better identify truly learner-centered approaches and align institutional priorities and structures.



Prioritize Human Capital

Educators need the time and skill to support learners' mental health, social and emotional growth, and personal development. Identifying opportunities to re-tool schedules and responsibilities and using technologies that support and deepen human relationships can help educators focus more fully on educating the whole person.



Provide Real-world Learning Opportunities

Giving learners the opportunity to practice both academic and non-academic skills can allow them to safely develop adaptability and self-confidence – skills they are going to need when they graduate and beyond. Education leaders can look for opportunities for learners to engage in or simulate real-life experiences, receive feedback and set goals for themselves.

⑤ Educating the Whole Person Happening Now



Amy Anderson

Amy is the Director of ReSchool Colorado, a multi-year initiative working to design and launch an inspirational education system that coordinates people and resources in new, dynamic ways.

“ A typical approach in education is to formulate a vision of where you want to go and backwards map a plan for reaching that vision from where you are today. We do this because we want to have a clear strategy for how to get from here to there.

The reality is that when you think about the future, you aren't quite sure of where you're going to land. You have hypotheses that can be tested, which is how we set out formulating our vision and strategy at ReSchool Colorado, where we are creating a new education system. Instead of creating the vision for the system first and then trying to figure out how people fit into that vision once it is built, we engage users of the eventual system in helping us to design it collaboratively. We shadow learners, engage families in conversation,

tap educators for their expertise, and collectively come up with concepts that can be prototyped for viability. Through this process the design of a new, learner-centered education system is emerging.

School is important, but it's not the only place where learning occurs. We're thinking about how to support learners in their quest to develop agency through the concept of a learner advocate network, and have the beginning stages of a competency-based learning framework in place to hold learning experiences and map learner pathways.

We're crafting a future together. ”

⑤ Educating the Whole Person

It's Your Turn

Ask yourself... What are you doing today?

How do you know what's working for students today?

In what ways do you currently work to educate the whole child?

What role do relationships play in your learning experiences?

How do you currently support the social and emotional health of students?

In what ways do today's learning experiences make space for students to identify and pursue their interests?

⑤ Educating the Whole Person

It's Your Turn

Ask yourself and others... What could we do differently in the future?

How might our school or district better capture student voice?

How might we find new ways to encourage students to develop as whole people?

How might we strengthen relationships within and beyond our learning community?

How might we extend support for social-emotional health and development?

How might our learning community enable more widespread interest-based learning?



Personalizing Learning in Community

Future Need

True learning happens when students feel engaged, empowered, and in control of their own educations, which is why their interests and needs must play a larger role in what is taught and how learning is organized. Personalized learning, however, doesn't eliminate the need to consider the world to which learners belong. Both students and their communities stand to benefit from the student agency and ownership that is cultivated through a personalized learning approach, strengthening social connections and creating opportunities for learners to cultivate civic responsibility. Learning can be both personalized and community-oriented.

⊕ Personalizing Learning in Community

Strategies for Today



Connect Personal and Community Interests

High-quality personalized learning accounts not only for a learner's individual needs, interests, and goals, but also for those of the community. Exposing students to new ideas and areas of need within their communities can create opportunities for socially relevant learning experiences and give learners a sense of real contribution and belonging.



Normalize Collaboration

Giving learners more access to personalized experiences and also to community partners, learning peers, experts and a wide variety of educators can help them develop skills and deepen learning. If educators assume that personalized learning is also collaborative learning, new opportunities can emerge.



Recognize Learner Impact

Students often receive feedback only through grades and test scores. By creating incentives and opportunities to participate in authentic and meaningful work beyond school walls – and finding ways to measure its impact – educators can help learners develop a greater sense of responsibility for the world around them and recognize that there are opportunities to learn and grow outside of the classroom.

Personalizing Learning in Community Happening Now



Jean Garnty

Jean is the former Associate Director of the Institute of Personalized Learning at CESA #1 in Wisconsin. Since 2010, the Institute for Personalized Learning has been building an educational model designed to personalize learning for all students, empowering educators through professional development, consulting and resources to create the conditions that allow all learners to succeed.

“It’s so much easier for educators to personalize learning in their classrooms if their learning is personalized. When I was with The Institute for Personalized Learning, rather than offering traditional professional development that tells you how you should do something, we provided educators with the opportunity to reflect on their own preferences for learning. Then we tailored our offerings to what they needed. Is it a seminar? A workshop? A moderated discussion? We looked at how personalized learning is done in the classroom and we modeled that for our teachers.

It can be easy to feel like you have to control every single thing that’s going on – but when we stop controlling our teachers, they stop controlling their kids.

How do we set up conditions so kids can reach out to people anywhere in the world? How can we set up systems that enable kids to get formal credit or academic recognition for experiences outside the school day? We do more than just bring in a guest speaker – we have students who are working with their teachers to co-design learning experiences, who are Skyping long-distance with experts in fields that interest them. They’re taking the initiative.

We focus on how educators can help their students develop agency because that’s what they’re going to need. That’s more important than a specific piece of content.))

It's Your Turn

Ask yourself... What are you doing today?

In what ways do you and your school personalize learning today?

How do you and your school currently encourage student collaboration?

What opportunities do students have to take their learning into the community?

How does your school or district currently incentivize volunteer experience, community involvement, or extracurricular activities?

It's Your Turn

Ask yourself and others... What could we do differently in the future?

How might we begin personalizing learning or take personalized learning further?

How might we foster collaboration among students and their communities?

What community needs could be met by students, and how might we encourage students to get involved?

In what ways could we enable more opportunities for students to collaborate with community experts and stakeholders?

How might we recognize students' contributions beyond the classroom?

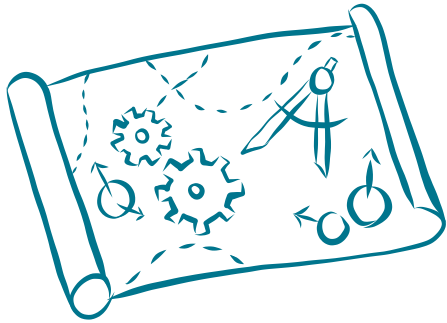


Creating Flexible Approaches to Learning

Future Need

The rigidity of current funding approaches, administrative and governance structures and policy frameworks can be a barrier to meaningful change. But new technologies, organizational structures and cultural practices can open the way to new ways of coordinating and supporting learning. They can also provide greater transparency and the means to collect and implement feedback quickly, addressing not only today's constraints, but also building more responsive organizations and networks for the future.

Creating Flexible Approaches to Learning Strategies for Today



Pilot New Approaches

You don't have to transform the system on day one. Educators, schools, and districts can find manageable, small-scale ways to prototype ideas within existing systems and school models. Innovation is possible through school- or district-based research and development, maximization of partnerships within the community and creative use of community assets.



Learn from other sectors

Considering how other sectors manage change and administer and coordinate their work can illuminate new approaches and raise possibilities for action. Homeschooling, the health care sector or even the entertainment business can all spark inspiration for K-12 leaders.



Use Technology to Enable Responsive Administration

With the increasing prevalence of technologies such as computer algorithms that manage work schedules and online learning networks, educators have new options for coordinating and supporting learning. Effective use of technology can enable schools and districts to be in contact with families, communities, and experts today and to make wiser use of data tomorrow.

Creating Flexible Approaches to Learning Happening Now



Steve Schultz

Steve is the Superintendent of Mesa County Valley School District 51 in Colorado.

“ I’ve been in education for 35 years. Traditional education systems can be very hierarchical, very redundant. I knew we needed a change.

We did some research on functional teams, and we collaboratively identified teams focused on school leadership support, family and community connections, and advocacy and support. We have reorganized our entire system to be more agile and responsive to needs in the field – true support, as opposed to a

hierarchical model. Rather than routing people to multiple places, we’ve created metrics to measure how we resolve things, the outcomes we’re working towards. Everyone is organized around the work, not the people. Instead of a traditional job description, each person has multiple, clearly-defined roles. There’s accountability, autonomy. People are where they belong.

I didn’t come to my staff and say, ‘We’re doing this.’ We did it together. ”

It's Your Turn

Ask yourself... what are you doing today?

What organizational changes do you wish you could try if you had the time and permission?

Where do you see new possibilities for organizing or supporting learning?

What developments outside education intrigue you, and why?

What kinds of data would best support your work with families, your colleagues, and within your community?

Creating Flexible Approaches to Learning

It's Your Turn

Ask yourself and others... What could we do differently in the future?

Where might we pilot some new ideas to advance our vision for learning?

What small steps could we take today to make our ideal organizational structure a reality?

What might we learn from how fields outside education coordinate their work and respond to the needs of their communities?

How might we leverage data to create new forms of collaboration and communication beyond the walls of today's classrooms?



Grounding systems Change in Equity

Future Need

Every day, education is called upon to innovate, change and improve. Still, new is not always better, more equitable or more supportive of learners. It is all too common for well-intentioned efforts or initially lauded innovations to fall flat or do unintended harm, especially when they do not specifically address the needs of traditionally underserved learners. Yet some new approaches could help educators address persistent problems of equity and access. When it comes to making system-level changes and choosing what new technologies and opportunities to embrace, educators can consider what will work well for all learners and what has the potential to address opportunity gaps.

Grounding systems Change in Equity Strategies for Today



Design for Equity

To help ensure that proposed changes lead to success for all students, education leaders can consider how well those changes might work for traditionally underserved learners, include those learners in decision making and genuinely engage diverse stakeholders. Equity is not a given in any education change effort, and unintended, inequitable consequences can emerge. Find ways of asking students what they need and how they want to incorporate student voice into change initiatives.



Face Intimidating Changes Head on

For some learners and their families, the future of learning may seem even more complex and difficult than today's education system. Instead of assuming that the K-12 system's relative stability will continue and will insulate current schools and districts from change, leaders can consider future challenges and opportunities in advance and plan for how to enable, mitigate or adapt to emerging trends. Recognizing challenges in advance can help leaders be proactive in forming solutions that respond to the changing environment.



Ground Change in Learning Science

As you explore possible ways forward, it is imperative that potential reforms and innovations be grounded in learning science rather than in political or personal agendas or profit motives. Staying focused on what educators and researchers already know about learning and development can help K-12 leaders sort through these issues.

Grounding systems Change in Equity Happening Now



Russ Altenburg

Russ is the CEO of ReFrame Labs, a nonprofit incubator that supports diverse leaders in designing and launching innovative public schools in Los Angeles. ReFrame Labs works with school leaders to build schools within communities, rather than for communities.

“What emerged out of the LA Unified School District’s iPad rollout is an awareness that hardware is not a strategy. They needed to have deeper conversations around instructional models and how technology could support them, and what we could do differently that would better serve all students.

And it doesn’t start and stop with us – if we’re trying to improve education conditions for our most underserved and lowest income communities, we need to have true engagement from individuals who belong to those communities. Our leaders need to better reflect the

communities we are trying to serve. We can’t set the agenda and then mobilize them to that agenda. ReFrame is actively incorporating community perspective into our school launcher fellowship, encouraging leaders within the community to take charge – to help create the schools the community wants to see. ”

Grounding systems Change in Equity

It's Your Turn

Ask yourself... What are you doing today?

How does your school or district currently involve multiple perspectives in decision making?

Where do you see positive examples of other organizations' incorporating the voices of the communities they serve into their work?

What is already working within the community to ensure equity?
How could it be adapted for education?

What system-level changes would you like to see in your school, district, or beyond?

How are you and your colleagues staying up to date on developments in learning science?

 Grounding systems Change in Equity

It's Your Turn

Ask yourself and others... What could we do differently in the future?

How might we engage all community perspectives and address the needs of underserved populations in planning and decision making?

How might we stay current with what's happening in our students' communities and encourage authentic community engagement?

How might we learn from and collaborate with other organizations that are working to ensure equity?

Where do we need to take bold steps to pursue system-level changes? How might we begin?

How can we find ways to ground new initiatives in learning science?



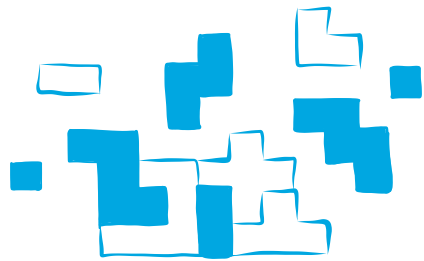
Renegotiating Definitions of success

Future Need

Today, success is most often measured in the form of scores and rankings determined by people far away from learners. But K-12 leaders see learning achievements every day that cannot be captured by a test score. Indeed, some of the most important dimensions of learning can be the most challenging to measure. Looking ahead, the changing external environment promises to call into question some of our fundamental assumptions about what learners truly need from their education experiences. Considering what success looks like, and the role of schooling in supporting and furthering students' success, is critical. This work isn't for educators alone. We must reexamine what we want from education systems and ensure that communities have a voice in that discussion.

Renegotiating Definitions of success

Strategies for Today



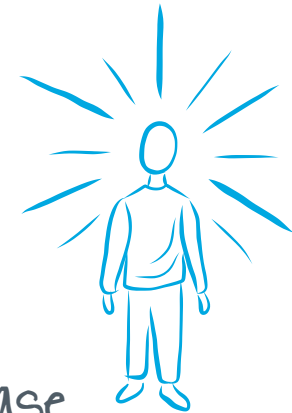
Align Incentives

The K-12 education system is incentivized to meet outcomes that are often misaligned with what learners, families and educators say they want from education. Collaboratively and clearly identifying what success looks like – apart from official definitions – can help learning communities devise new approaches and align incentives and interventions to their common goals.



Look Beyond Graduation

Today's schools are typically considered successful if they have set learners up for the next life stage, sometimes at the expense of considering what is currently relevant and meaningful for learners and what they might need to be prepared for a more distant future. Considering what learners want now and might need for the future can help education leaders broaden definitions of success and prepare learners more fully.



Showcase What Learners Can Do

The broader public often holds a limited view of what young people, especially low-income students or students of color, are capable of accomplishing and what impact they can have on their communities. Bringing learners front and center to share their work, talents, and ideas publicly can spur adults to rethink their beliefs about learners' abilities to demonstrate agency in their learning, contribute meaningfully to their communities, and follow their interests.

Renegotiating Definitions of success

Happening Now



Valerie Greenhill

Valerie is the President and Co-Founder of EdLeader21, the nation's first personalized learning community dedicated to helping district leaders prepare students for citizenship in a changing economic landscape.

“ If we want our graduates to thrive in college, career, and life, they need more to show for their experience than test scores.

They need to demonstrate the 4Cs – critical thinking, communication, collaboration, and creativity – along with content mastery. All educators have a role to play in achieving this vision. EdLeader21's professional learning community defines what it looks like for a learner to demonstrate 4Cs mastery. We help education leaders design and deliver 21st century systems of teaching and learning. We co-create tools like 4Cs

rubrics and performance assessments with our members, who are learning from each other as they transform their districts and schools.

We couldn't start this work until we were very clear about what we wanted our students to know and be able to do, and then we needed to organize our systems to support those competencies. If we aren't clearly focused on what we want our students to know or do, then we are doing our students a disservice. ”

Renegotiating Definitions of success

It's Your Turn

Ask yourself.. What are you doing today?

What do you see as the purpose(s) of education?

What are your ideal measures of success?

How do you currently give learners the opportunity to demonstrate their strengths and interests, academic or otherwise?

How might you bridge the gaps between today's approaches and your future ideal?

Renegotiating Definitions of success

It's Your Turn

Ask yourself and others... What could we do differently in the future?

What does our ideal graduate look like?

What will students need to know and be able to do in ten to twenty years?

How are we working to support students in developing those skills and knowledge?

Where do we need to change our practice or incentives to bridge the gaps between today's approaches and future needs?

Conclusion

Future approaches to learning need to **educate the whole person**, considering not just what learners need to succeed in school, but what they need to be a successful person. We must also find ways to **personalize learning in community**, creating opportunities for students to connect and contribute locally and globally – and to show how their activities demonstrate learning. Our **approaches to learning and coordination must be flexible** and adaptable, putting what’s best for the student and the community, rather than what’s traditional, at the center.

When pursuing change, we must **make equity a chief concern**, ensuring that we adopt new practices and innovations that strive to serve all learners well. And when it comes to defining what success in school looks like, we can’t take grades at face value; we must consider what we really want students to learn, what we want them to be able to do and how best to reflect those **new definitions of success**.

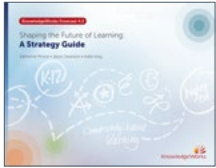
For these things to happen, and ultimately for K-12 school-based education to support all learners in a complex and rapidly changing world, today’s education leaders and innovators need to play a central role in shaping the future of learning. While there is a delicate balance between moving toward a future vision while

attending to the day-to-day operations of today’s schools, it can be done, and it can be done by you.

It is imperative that we prepare all learners for the future they will need to navigate and lead. When you begin by articulating your own vision for the future of education, revisiting what you are doing today and considering what you must do to support the success of all learners in the future, the work becomes not only possible, but imperative.



Related Resources



Shaping the Future of Learning: A Strategy Guide

This resource explores five foundational issues facing education as we look ahead to 2025 and summarizes strategies to help K-12 schools; informal and community-based learning organizations, such as museums and libraries; and higher education institutions create a future that serves all learners well.



The Future of Learning: Education in the Era of Partners in Code

Over the next decade, our lives will become so inextricably linked with our digital companions that we expect to find ourselves living as partners in code. These changes will open a wide set of possibilities for education that we all can help shape.

[Order print copies](#) of KnowledgeWorks' fourth comprehensive forecast on the future of learning to explore how five drivers of change might impact people, structures, and society, as well as potential opportunities and challenges on the horizon.



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