From Vision to Reality

Personalized, Competency-Based Learning for All Kids

by Virgel Hammonds and Jesse Moyer
On my first day as a principal at Lindsay Unified School District in Lindsay, California, one of my former students and his father came into my office. I was still in the middle of unpacking and getting settled in, but I was excited to see him. He’d been an English language learner in my English classes in seventh and eighth grade and it had been years since we’d talked.

I asked him what was going on, what his plans were now that he’d graduated. He seemed anxious, but it wasn’t until his father took a newspaper from my desk and placed it in front of his son, repeatedly asking him to read it, that I realized why. He turned to his father and said, “You know I don’t know how to read.”

I’d had this student for two years. I remembered him being a great kid, a hard worker, but he’d just graduated and we’d failed him. It was in that moment that I recognized as an educator that we just can’t do the same things. We have to think differently about how we support kids.

At KnowledgeWorks, we believe the bright spark that lies within each child can shine brightly when immersed in a learning culture that values their interests, backgrounds, opportunities and challenges. We also believe in transparency — ensuring that everyone, from students to teachers to families and community members, understand expectations and can see the why and the how behind what students are learning. Because transforming education is not the sole responsibility of our amazing teachers and schools, the inclusion and engagement of community stakeholders is essential to designing learning experiences that prepare all children for individual and community success.

I don’t want any educator to ever feel the way I did in that moment. Our children – not some, not most, but all of our children – are counting on us to deliver on the passion, the enthusiasm and the opportunities they aspire to achieve when they enter our schools. **The time to act is now.**
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Graduation Isn’t the End of Learning

In an increasingly dynamic workforce, a learner’s ability and drive to pursue new ideas and approach problems with creativity and a growth mindset is going to be more critical than ever.

Demand is growing for comprehensive, relevant and rigorous learning environments that empower students to reason, to analyze and to create and collaborate with others to develop solutions and apply what they are learning in a real-world context. Students must be creative, strategic thinkers who can relate and compete on a global scale – and shape their own futures in a time of exponential change.

More than anything, and regardless of what they do after graduation, students must have the capacity and the desire to continue learning. Personalized, competency-based learning empowers learners to do just that, by providing educators with the flexibility and necessary opportunities to understand each learner’s needs, strengths and challenges.

This resource is designed to help school districts take steps toward personalized, competency-based learning, and equip leaders with the following support to do this critical work:

- **Rationale** for making the case for personalized, competency-based learning, including what it means and resources to support conversations in a learning community
- **Guidance** on crafting a future-focused vision and why it’s important
- **Essential considerations** for educators, students and all stakeholders to ensure implementation of personalized, competency-based learning is successful
- **Resources** on how flexible state and federal education policies can support personalized learning

To prepare every student for success, leaders must look beyond their own district and this moment in time and think about more than this year’s group of incoming students, this year’s graduating class. Students need a strong foundation, and that foundation is strongest when we consider the future, leverage policy innovation and grow the capacity of our educators.
Making the Case for Personalized, Competency-Based Learning

Teachers go to classrooms every day prepared to do their best for students. Go into any school in the country and you can find stories of herculean efforts on the part of teachers to give every student the education we all know they deserve. Unfortunately, sometimes even the most outstanding efforts aren’t enough. This shouldn’t be laid at the feet of teachers. This is because teachers are working in a system that isn’t designed to deliver the results we need in today’s society. Simply put, today’s education system is broken.
National high school graduation rates have never been better – **84 percent in 2017**. But there’s more to the story than numbers.

While educators should celebrate that more students than ever are graduating, there are significant gaps in their knowledge and their ability to succeed in higher education. **Only 26 percent** of students taking the ACT showed proficiency in all four content areas covered by the college entrance exam. In 2017, only 46 percent of students who took the new SAT met or exceeded the new College and Career Readiness benchmarks. These statistics are consistent with college remediation rates. Simply put, while more students than ever are completing high school, equity gaps are growing and graduates aren’t prepared for the next step in their lives.

### National College Readiness

<table>
<thead>
<tr>
<th>African American</th>
<th>Hispanic</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td>6%</td>
<td>14%</td>
<td>34%</td>
</tr>
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6 percent of African American and 14 percent of Hispanic students met all four ACT college-readiness benchmarks, as compared to 34 percent of white students tested. These students were also more likely to need remedial courses.

28-40 percent of all first-time under-graduates enroll in at least one remedial course, costing students and states $2.3 billion each year. Less than 50 percent of students complete all of their remedial courses.

According to a report released by the U.S. Department of Labor in 2017, there were six million open jobs in the United States, with 6.8 million unemployed people across the country. Many workers do not have the skills required by employers to fill open positions, and as the rate of automation and the sophistication of artificial intelligence rises, smart machines (i.e., artificial intelligence, robotics, and other forms of automation) continue to assume more and more responsibility formerly assigned to humans. By 2030, between 75 and 375 million workers across the globe will have to switch careers. Workers that make the shift successfully will not only have the requisite skills and knowledge, but also the social-emotional skills necessary to make decisions and complete tasks that machines can’t. If the traditional education system can’t prepare everyone for the jobs of today, how can it be expected to fill the jobs of tomorrow?
Rapid change requires a new look at what it means to be college and career ready.

The current education system, with its hesitancy to embrace significant societal shifts, including changes in demographics and advancements in technology, does not prepare all students for college and does not prepare them for careers.

“Every student needs at least 5-Cs – content mastery, critical thinking, communication, collaboration and creativity – to thrive in the 21st century. Personalized, competency-based education is an important pathway for any educator who strives to make this vision a reality for their students.”

Valerie Greenhill
President, EdLeader21

Social-emotional skills will enable people to navigate, adapt and grow

According to “The Future of Learning: Redefining Readiness from the Inside Out,” a recent research report completed by KnowledgeWorks’ Strategic Foresight team on the skills individuals will need for careers in 2040 and beyond, core social-emotional skills like emotional regulation, empathy and self-knowledge will be critical to succeed in a future that looks very different from today.

These core social-emotional skills, which should be embedded into the academic curriculum, will enable people to navigate, adapt and grow in a shifting workplace. These practices include the ability to:

Thrive in ambiguity and uncertainty
Communicate and create with numbers
Make friends with people and machines
Learn anything, anywhere
Cultivate inclusive communities
Take initiative and self-advocate
Think differently
Solve problems

Learn more about the social-emotional skills students will need to succeed in 2040 and beyond. Download “Redefining Readiness from the Inside Out”
Every student deserves to be supported with high expectations for achievement.

“The traditional, one-size-fits-all K-12 system is simply not designed to produce the goals that our children, communities and nation need and deserve. Communities across the nation are developing more meaningful definitions of student success that focus on the skills and dispositions they need to flourish in a rapidly changing, globalized world. Personalized, competency-based education holds promise to ensure every student develops mastery of the highest standards possible and is prepared to succeed in college, careers, and citizenship.”

Susan Patrick
President and CEO, INACOL

By designing learning around personalized mastery of transparent and rigorous academic and social-emotional learning outcomes, educators can ensure every student is prepared. To do so, the **traditional system must be transformed to a personalized, competency-based learning environment** that puts the student at the center by:

**Promoting equitable opportunity:** Every student is challenged to master and grow beyond the same, transparent learning targets, with flexibility for how they demonstrate what they learn. To achieve this, students have access to equitable student supports tailored to meet each student’s needs.

**Preparing students for an uncertain future:** Teachers support students’ ownership of learning, helping them develop the skills they need to create their own paths in the future.

**Focusing on the whole child:** In addition to academic mastery, learning develops each child’s social, emotional, mental and physical needs.

**Empowering individuals to reach their potential:** Students are encouraged to explore their strengths and interests, while receiving the support they need.
For teachers, this requires a foundational shift in the teaching profession away from the traditional, practice-based education – often referred to as the industrial or factory model – that values standardizing inputs for standardized outputs from which students are sorted into careers. In a personalized competency-based environment, teachers are not constrained by curricular materials and pacing guides. Relationships drive learning and teachers are empowered to make use of their critical thinking, problem solving skills and creativity to meet each student where they are.

“Relationships drive learning and teachers are empowered to make use of their critical thinking, problem solving skills and creativity to meet each student where they are.”

Erin Morrison, Navin Elementary School, Marysville, Ohio

Resources to help build a community-wide commitment to personalized, competency-based learning:

- Traditional Education vs Competency-Based Learning
- Video: Competency Education and Personalized Learning
- Dispelling the Myths: Frequently Asked Questions on Competency-Based Education
- The Role of the Teacher in a Personalized, Competency-Based Classroom
- Talking with Families About Transcripts and Grading

“I can take my students lead and do whatever I feel is best for them. I’m not put into a mold and have to teach a specific way. I can adjust my teaching to what my students’ needs are.”

Erin Morrison, Navin Elementary School, Marysville, Ohio

“At the heart of personalized learning are equity and opportunity. We are reimagining education and building a system in which ALL students can achieve regardless of background or circumstances. We are fostering a generation of students that will be prepared to tackle the unique challenges and embrace the limitless possibilities of the future.”

Lauren McCauley, Personalized Learning Education Associate, South Carolina Department of Education
Putting students at the center requires a vision aligned to four vital elements: deeper learning, equitable and essential curriculum, learner agency and social-emotional skills.
**Deeper learning** ensures a level of rigor and depth of knowledge that is essential for students to be successful in college and career. Educators help students regularly engage with inquiry-based, problem-finding and problem-solving tasks that empower them to connect what they’re learning to their interests and pursue learning opportunities within their community. Without deeper learning, there is little assurance that students will meet the high expectations established for all students.

This rigor is grounded in a deep commitment to **equitable and essential curriculum**: a set of standards and transparent learning targets to which each and every student is held accountable. This set of learning targets provides an easily understood roadmap of what is expected of them as they work towards graduation.

Cultivating **learner agency** refers to the level of control, autonomy and voice that a student experiences: where they learn, how they learn and how they demonstrate what they know. This can manifest in the choice of learning environment, subject matter, approach and/or pace. Students are not passive recipients of knowledge, but rather drive their own learning. Only when students feel a genuine level of ownership will they truly, deeply invest, applying what they know to real-life situations and bringing relevancy and community impact to the learning experience.

Lastly, the transition from a traditional learning environment to one that is personalized and competency-based requires a focus on **social-emotional skills** such as growth mindset, emotional regulation, empathy and self-knowledge, that prepare learners for an uncertain and rapidly changing future of work. Integrating these skills ensures success for all students no matter what course they choose after graduation.

And yet, these four aspects will only be successful if they are aligned to a **vision for all kids**, supported by a **transparent culture**. Everyone in the learning community must understand their role in pursuing that vision and share a commitment to innovation and refinement in service of that locally-designed vision.
A strong vision should be grounded in what the community wants every student to know and be able to do upon graduation. This vision is bigger than the district itself, and the approach to developing the vision should reflect the broader community.

A wide group of stakeholders including district, school and teacher leaders; community, higher education and business representatives; and parents and students should be included, ensuring community-wide commitment to the vision. When grounded in the community’s guiding principles, strategic decisions are aligned to the community’s goals, allowing a learning community to be more intentional and aligned in its use of time, money and resources in its pursuit of serving every child.
You won’t know what your community wants for learners until you ask.

As the visioning process moves forward, it is important to not only think about the current state of the learning community, but also how you can take action to prepare students for a future that will look very different. To prepare for a certain uncertainty, learning communities may collectively tackle their desired state by:

“Not every school or classroom is the same, but elevating a common vision will ground everyone in the importance of the work. That creates meaningful change.”

Jesse Moyer
Sr. Director of School Development
KnowledgeWorks

1 Developing a profile of a graduate, including the key knowledge, skills and dispositions you hope each student will embody. Consider:

- What the world of learning and work could be like in 2040 and beyond, and what graduates will need to thrive. How might the community and its demographics change? How might this impact how and where people work?
- Local workforce development forecasts. What happens if forecasts come up short or happen faster or slower than planned?
- Plans and intentions of local businesses
- Plans and intentions of local government / chambers of commerce
- Economic development plans, policies
- Student plans and visions. What do they want for their futures? How do they think school should help them prepare?
2 Considering the implications of the future of learning on learners, teachers, administrators and the education system.

- Based on the possible changes to the future of work in your context and your community’s profile of a graduate, what types of learning experiences will be needed to cultivate the knowledge, skills and dispositions you have identified?
- What experiences should be included?
- What experiences should be avoided?
- How might these changes affect teaching? Will professional development and teacher training need to change?
- What does school administration look like in this type of educational experience?
- What does a school day look like for a student?

Based on conversations with educators across the country about the implications of the future of learning, KnowledgeWorks uncovered key strategies to address critical areas of change identified in our *Future of Learning Forecast 4.0*. Consider what your district could do differently to:

- Educate the whole child
- Personalize learning in the community
- Create flexible approaches to learning
- Ground systems change in equity
- Renegotiate definitions of success

3 Given these implications and your profile of a graduate, discuss how the future of learning might impact the learning community’s vision:

- In content areas or by grade levels
- Reflecting on core activities to determine if they are consistent with the learning community’s vision

Resources to help learning communities align their vision to the future of learning and work:

- **Toolkit: Laying the Groundwork for a Community-Wide Vision for Personalized Learning**
- **The Future of Learning: Redefining Readiness from the Inside Out**
- **Shaping the Future of Learning: K-12 School-Based Education Strategy Workbook**
- **Shaping the Future of Readiness: A Discussion and Facilitation Guide**
- **EdLeader 21 online Profile of a Graduate Tool**
Everyone has a role to play in moving your vision to reality

Understand why transformation is imperative, and the conditions needed to scale impact for all students.

Through deep engagement with the newly created vision for teaching and learning, guiding principles can be crafted, ensuring understanding and cultivating deep commitment to the vision. How you talk about the vision is important: a common language for all stakeholders contributes to the transparent culture that is vital to scaling personalized, competency-based learning.

Finally, district and school leaders and teachers should understand the conditions necessary for scaling personalized, competency-based learning. Alignment between these conditions and your community’s vision will ultimately lead to the district’s transformation.
FOR STUDENTS:
Students are the most important stakeholders in a personalized, competency-based system. Much effort should be dedicated to giving students the tools to navigate that system.

Student-centered learning practices leading to deeper learning including growth mindset, brain literacy, and working with teachers to co-create classroom standard operating procedures. Operationalizing all of these concepts in the classroom, paired with rigorous expectations for all students, empowers students to pursue their own success. Establishing an environment that is adjusted to meet the needs of learners in real time is a constant, and learners share in the knowledge that making mistakes is all part of the learning process.

Learner agency and empowering students to use voice and choice in their own learning. In a personalized, competency-based learning environment, learner agency specifically refers to the level of control, autonomy and voice that a student experiences. This can show up in a classroom in many different ways including students understanding how they best learn, how they will provide evidence of their learning on specific targets and if they are ready to move forward or if they need additional supports for mastery.

Extended learning opportunities, often beyond the walls of the classroom, provide authentic, rigorous, problem-based tasks that are designed to ensure high levels of engagement. These learning experiences empower students to demonstrate mastery of knowledge and social-emotional skills by using design thinking to solve real-world problems that connect with their interests and passions. Teachers and students can co-design these experiences and learning outside of the school day can be credentialed as part of the learning process.
FOR TEACHERS:
Teaching in a personalized, competency-based learning environment requires significant development and commitment on the part of teachers.

Personalized professional development designed to build capacity. While many of the changes in a personalized, competency-based learning environment fall to teachers to implement, most teacher preparation programs and professional development opportunities do not prepare educators for the day-to-day challenges of supporting every student. For professional development to have the deepest impact possible, it should be personalized to teachers’ needs, just as learning is customized to meet each student’s needs.

Freedom to try new things, learn from failure and continuously improve. This includes not only scaffolding professional development so one skill builds on another, but also measuring the impact and transfer of learning through online surveys, school walkthroughs, self-reflection and classroom observation. Initially, these data-gathering strategies will provide a baseline to guide the delivery of professional development and the systemic design that meets the needs of each student. Used over time, the data gathered from these processes can be used to show professional growth, opportunities to target additional supports for educators and continual progress toward the community’s vision and profile of a graduate.

Networking teachers to learn from and with each other. This could manifest itself in different ways including professional learning communities, content or grade-level specific groups, or a national network that brings together practitioners from across the country.
FOR THE SYSTEM:

Teachers are critical to implementation, but school and district leaders must cultivate the conditions and culture necessary to sustain system-level transformation:

Curriculum, consisting of standards and learning targets, should be consistent and easily understood by every stakeholder, especially students. However, the ways in which students meet those standards may differ to provide a personalized learning experience for each student.

Instruction should be focused on teaching students how to learn, shifting from a teacher-led to student-led model that may incorporate differentiated instruction, direct instruction, mastery learning, blended and project-based learning, flipped models, etc.

Each district should implement a comprehensive assessment system, including formative, interim, and summative assessments, providing data that can be used to monitor student progress and adjust day-to-day learning activities.

Districts should cultivate flexible learning environments, both inside and outside of the school walls, that support high expectations for all students while fostering a culture of trust, support, equity, voice and inclusiveness.

Students should get the just-in-time learner supports they need to be successful when they need them, not after they’ve taken a summative assessment at the end of the year.
Each district should offer a job-embedded **professional development program for educators** that aligns with the district’s vision for teaching and learning and to student needs. This should foster a culture of collaboration and continuous improvement while leveraging technology that creates a customized experience for each teacher that is available at any place and time.

Districts should maintain a **comprehensive data system** consisting of learning management, assessment, and student information systems that are accessible to students and families at all times.

A district should have a **leadership development program** that identifies and trains leaders at the classroom, school, and district level.

Districts must have a **technology policy** that allows for ubiquitous, safe access to the internet.

Each district should cultivate **partnerships** with business, community and higher education constituents in their communities (including local and county government, recreation, youth serving organizations, faith-based institutions, etc.).

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**Resources to help make personalized, competency-based learning a reality:**

- Poster: Three Core Social-Emotional Skills Students Need to Succeed in 2040 and Beyond
- 5 Goals to Set This Year for a Strong School Culture
- District Conditions for Scale: A Practical Guide to Scaling Personalized Learning™
- The Shifting Paradigm of Teaching: Personalized Learning According to Teachers

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State and Federal Policy Offers More Flexibility Than You Might Think

While implementing personalized, competency-based learning can be done in a traditional policy environment, policy alignment is essential for scaling results to all students in a district. District leaders are important advocates for policy flexibility that enables communities to pilot and scale next generation teaching and learning models.
To advance innovation at both the state and district level, consider how you could introduce:

- Advocacy for state reform of teacher pre-service, certification, development and evaluation systems to prepare educators for new teaching roles in personalized settings
- Policies to determine how, when and where instruction is available
- Flexible testing windows and build district capacity for formative, interim and performance-based assessments
- Flexibility in how school time is used, both throughout the school day and the school year
- A repeal of seat time requirements that are not tied to learning
- The ability to award credit for learning that happens outside of school

The Every Student Succeeds Act (ESSA) provides states and districts with significant opportunities to advance personalized learning.

These opportunities provide greater flexibility in the design of accountability, assessment and school improvement systems as well as greater funding flexibility to support state and local needs. Many states leveraged these opportunities as they developed their ESSA implementation plans. Significant policy trends that advance personalized learning include:

- Incorporate personalized learning into their vision for ESSA implementation
- Explore a micro-credentialing system for educators
- Launch online personalized professional development platforms
- Develop online school quality dashboard
- Adopt a high school accountability indicator that emphasizes multiple pathways to demonstrating college and career readiness
- Build accountability systems that incentivize improved performance for all students regardless of whether they fall above or below proficiency
- Establish an extended-year graduation rate indicator
- Prioritize personalized learning strategies for school improvement
- Prioritize community engagement
- Ensure all students have a personalized learning plan

As states begin to implement their ESSA plans, it is important for districts to engage deeply with state leaders to leverage opportunities to advance a vision for personalized, competency-based learning. Further, as states explore future amendments to their ESSA plans, it is critical that district leaders help identify barriers or areas of misalignment that require policy change.

Learn more about the policies behind personalized learning:

- Personalized Learning and ESSA
- ESSA and Personalized Learning Dashboard
- A State Policy Framework for Scaling Personalized Learning
Students Deserve a Stronger Foundation for Their Future

The decisions we make today have a direct impact on the future for each child in our communities. By coming together around a common focus on truly preparing students, we can realize a new vision for the future that arms students with the skills and knowledge they’ll need for whatever is next. We can create a culture and system that empowers educators with the freedom to try new ways to support individual students. From the classroom to the local community to the statehouse, we can create policies that better serve our students. A strong foundation for every student’s future can be a reality.
We can help.

Our entire team at KnowledgeWorks believes that all students deserve a personalized learning experience. We’re dedicated to advancing an education culture that empowers every child to take ownership of their success through personalized, competency-based learning.

With nearly 20 years of experience exploring the future of learning and partnering with schools and state and federal policymakers, we believe in working together to create a system-wide approach to grow and sustain student-centered practices. Through customized professional development, in-depth research on the future of learning and federal and state education policy guidance, KnowledgeWorks has created opportunities for more than 135,000 students in 20 states through competency-based learning and early college.

“When we work with teachers to develop personalized learning practices, I often recall one of my favorite Maya Angelou quotes: ‘Do the best you can until you know better. Then when you know better, do better.’ Together, we all focus forward, leaning into our own growth as facilitators of learning, doing what is best for kids.”

Robin Kanaan
Director, Teaching and Learning, KnowledgeWorks

We partner with states, districts and educators to help

• Develop a community-wide vision focused on preparing graduates for the future
• Prepare for the future through strategic foresight research and workshops
• Implement personalized, competency-based learning
• Develop an evidence-based strategic plan
• Grow the capacity of educator and leaders through professional development
• Create transparent learning competencies
• Advance early college opportunities
• Understand and advocate for policy change that supports local innovation
• Connect with and learn from other districts across the country

Get help moving personalized learning from vision to reality: Schedule a call with a KnowledgeWorks teaching and learning expert.
**About the Authors**

**Virgel Hammonds**, Chief Learning Officer for KnowledgeWorks, partners with national policymakers and local learning communities throughout the country to advance personalized, competency-based learning. Virgel previously served as the superintendent of Kennebec Intra-District Schools (RSU2) in Maine and high school principal at Lindsay Unified School District in California. Virgel also serves on the Innovation Lab Network Leadership Advisory Council, Jobs for Maine Graduates Executive Board, Maine Academic Decathlon Executive Committee, Maine Healthy Communities Board, CompetencyWorks Advisory Board, Mastery Transcript Consortium Advisory Council and International Association for K-12 Online Learning (iNACOL) board. Virgel earned his bachelor’s from the University of Massachusetts Lowell and his master’s in education from Fresno Pacific University.

**Jesse Moyer**, Sr. Director of School Development for KnowledgeWorks, leads operations and development activities for KnowledgeWorks’ work with school districts across the country. Prior to his current role, Jesse led research on personalized learning policy, working closely with various states on education advocacy opportunities, and supported the organization’s future of learning forecast work. Before joining KnowledgeWorks, he served as Director of Chapter Services for Phi Delta Theta Fraternity General Headquarters. Jesse earned his bachelor’s from the University of South Dakota and his master’s in education from Xavier University.

**References**


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KnowledgeWorks is a nonprofit organization dedicated to advancing personalized learning that empowers every child to take ownership of their success. With nearly 20 years of experience exploring the future of learning, growing educator impact and working with state and federal policymakers, our passionate team partners with schools and communities to grow a system-wide approach to sustain student-centered practices so that every child graduates ready for what’s next.

Get more resources to help make personalized learning a reality at KnowledgeWorks.org.