

K-12 Guide to Educational Growth

From Student Recovery to Reimagining Schools



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Introduction

As we work to emerge from the COVID-19 pandemic, our K-12 education system is left with two critical questions:

1. **How do we support our students in addressing their immediate learning recovery?**
2. **What new opportunities do we have to reimagine how education will look in the future?**

Since the start of the pandemic, students came up against challenges in consistently accessing instruction and participating in structured learning opportunities. This was especially true for students who were already facing disparities. Student engagement and outcomes were too often impacted.

Despite these hurdles, new experiences have fostered interest in new approaches. There now exists a unique opportunity to reimagine the way we support student success through a more flexible and engaging curriculum and instruction.

“The mindset needs to be of redesigning and improving, not merely treading water until we get back to the traditional way of doing things.”

Grace Stevens, *Teaching in the Post COVID Classroom*



A growth model can help us accelerate student learning now and build a more student-centered, resilient instructional system moving forward.

- A **student growth model** authentically builds on each student's strengths, interests, and needs in order to address unfinished learning and accelerate continued development and enrichment.
- A **school growth model** provides the flexibility needed to support multiple student pathways and mitigate ongoing, foreseeable disruptions, thus delivering continuity of quality instruction for all students.

In combination, these approaches can enable our K-12 systems to emerge from the pandemic stronger than ever for both the short- and long-term to support student success.

Defining Learning Recovery

Understanding “Learning Loss”

Recent educational funding and attention have been focused on student “learning loss”. Challenging circumstances meant that schooling was often less than optimal despite the efforts of educators, students, and families. Notably, many students faced barriers to instructional access and engagement, in part due to gaps in teacher digital readiness and educational infrastructure.

Most references to learning loss are to lower scores on standardized math and reading/ELA (English Language Arts) benchmark assessments. Also important is the impact on student absenteeism, graduation rates, and post-secondary matriculation.

Reviews of test data have identified lower scores for students during the pandemic compared to a similar historical cohort. There is often a widened gap for traditionally under-served students as the pandemic exacerbated inequities. Research is evolving regarding the degree and nature of learning loss. Is it stagnated, unfinished, absolute, or akin to a prolonged summer slide?

Reframing as Unfinished Learning

How we define and frame learning loss has significant implications. At D2L, we share the concerns of families and educators that a deficit or “loss” framing based on narrow measures could run counter to a student



growth mindset and hinder effective instructional remedies. In contrast, understanding the issue as “unfinished learning” better captures the opportunity. A deficit approach can amplify inequalities and perpetuate learning gaps and may:

- Lead to a narrow focus on re-teaching prior year content in order to help students catch up— “[R]ecent research from the New Teach Project suggests that well-intentioned approaches that pull students out of grade-level instruction to ‘reteach’ earlier-grade content can reinforce low expectations and create vicious cycles of underachievement.” (*McKinsey*)
- Lead to a reduced portfolio of instructional methods that rely too much on extended instructional hours and remedial interventions that further disengage students.
“[D]eficit perspectives and thinking lead to poor and basic instructional practices.” (*Education Week author interview*)
- Negatively impact student self-perception and attitude, as well as reinforce emotional deficits (e.g., invoking a lack of confidence, anxiety and dejection), and cognitive deficits if students view their previous year as lost or wasted.

An Asset Approach to Learning Recovery

An alternative **asset-based growth approach** to unfinished learning and recovery recognizes each student's lived experience and social, emotional, and academic journey. It authentically builds on students' unique strengths, interests, and needs. It recognizes the significant challenges as well as the growth in often unmeasured mindset and competencies (e.g., empathy, digital literacy, creativity, and civic responsibility). It provides a more positive mindset to address unfinished learning.

According to a **survey by Morning Consult**, “70% [of college students] believe the difficulties of 2020-21 have made them more flexible, more self-motivated and more emotionally resilient. Likewise, parents recognize positive outcomes in their [secondary school] children . . . [to] increase learning and acquire new skills, particularly around technology.”

Underlying this is **growth mindset research** that finds that a person's perception about their intelligence and ability to learn is self-reinforcing to their learning efforts and therefore their outcomes. The more students believe they can learn, the more they try to and do learn.

This growth model, one that focuses on grade content and tiers interventions, can provide a more positive and effective ramp for filling gaps in, and accelerating, learning.



“The better approach is for instructors to provide exposure to grade-level content, while scaffolding students with ‘just-in-time support’ so they can access such content.”

(McKinsey/TNTP)

An **asset-based approach** provides a pathway to stimulate student learning now and create a more student-centered, deeper, and resilient instructional system moving forward.

Addressing Learning Recovery with a Systemic Solution

Short-term approaches of extended school hours and remediation may be important to address unfinished learning, but they alone aren't enough to help us reach, engage, and instruct all students, especially those who face the greatest disparities.

A more holistic student and system growth approach includes five elements:

- 1. Student Well-Being and Social-Emotional Support:** Given pandemic disruptions, a go-slow empathetic environment will enable student readiness for learning.
- 2. Flexible Pathways:** Providing a variety of options for the time, place, and modality of schooling can support student agency, equity, and engagement.
- 3. Mastery-Based, Personalized Learning:** By basing student progress on demonstrated mastery of a learning goal independent of the instructional time spent on task, we can build student-centered paths that make the best use of teacher/student time and set students up for success.



- 4. Deeper, Authentic Curriculum and Instruction:** Providing more relevant, inclusive, and engaging content and instruction aligned to academic standards can support richer, more meaningful learning.
- 5. Single Door to the Classroom:** Students, families, and educators increasingly expect a one-stop digital learning hub to access learning content and community for their success.

In addressing these issues, we also explore below the need to consider three overarching issues:

- **Resilience**
- **Equity**
- **Professional Learning**



Student Well-Being and Social-Emotional Support

Students personal and schooling lives have been significantly disrupted during the pandemic. Some have thrived from the flexibility and opportunity to discover and grow outside traditional academics; others have been further separated from learning.

Regardless of the experience they had, students should be welcomed back to the classroom with empathy. That's why we need to integrate social-emotional support as an element that is fundamental to student readiness to learn.

1. **Go Slow to Go Fast.** It's tempting to race out of the block at the start of the school year and jump back into routine academics to squeeze more traditional instruction into fixed school hours. Instead, the **first priority should be getting to know students** and (re) establishing connectedness, with equity and inclusiveness at the forefront. Students' isolation, depression, and negative view of self are pronounced barriers to wellness and learning as we return to school. Go slow to go fast. Well-being is a fuse: It must come first and persist. (Michael Fullan)

2. **Nurture Well-being.** Supporting students health, social-emotional state, and overall **well-being** should be an ongoing, comprehensive, and multitiered process. "Authentic relationships are key to supporting our collective well-being. Take dedicated time to nurture meaningful connections with students so they know you care." (*Quinn, et.al., NPDL*) Connections must be meaningful in order to understand and effectively support the broad set of student needs. For disadvantaged students especially, this could include support for access to food, medical care, shelter, and other physical needs. As was reinforced during the pandemic, students cannot learn at school unless they're healthy and safe inside and outside of it.
3. **Authentic and Integrated Social-Emotional Learning (SEL).** Supporting student social-emotional growth should be integrated with learning and not simply sequenced as a siloed and sunseting step. Be intentional about social-emotional learning (SEL) to address each student's mindset, including encouraging resilience and inclusiveness. Design the school day to include joyful and instructional activities and tasks as well as to be a safe place for students to take intellectual risks and increase their confidence. Relying on advisory hours alone may feel disingenuous, and fabricated SEL exercises will fail to build relevance and impact.

Flexible Pathways

Many school systems offered some learning pathway flexibility prior to the pandemic, and the modality (online or in-person) choice was extended in many places due to the pandemic. There is new opportunity to be more intentional, varied, and scaled in the use of pathway flexibility to address both learning recovery and ongoing student success.

Flexible learning pathways enable student voice and agency, increasing motivation and empowering families to advocate for options that best meet their child's academic and family needs. "Student choice makes students active participants in their educations, thereby increasing levels of engagement." (*Hanover Research*)

We can think about learning pathway flexibility across three dimensions:

- 1. What? (Course and Content):** Schools have opportunities to enhance school, course, and content options through partnerships and technology. At the program and course level, examples include career and technical education, cooperative and work-based learning, early-college and dual enrollment, and open enrollment.

Within the course, schools can increase content relevance and inclusiveness to boost engagement and motivation. Examples may include concept application (e.g., a math problem described through sports), essay topic choice, or experiential and project-based learning.



- 2. Where? (Modality):** The pandemic experience has exposed educators, students and families to virtual learning at an unprecedented scale. While some struggled with these emergency, remote models, other students have thrived. Communities increasingly recognize the importance of having virtual and hybrid options to help meet student preferences and continuity of learning.

School systems have an opportunity to mature from the emergency remote models that relied on synchronous, concurrent, and whole-class instruction. More effective models leverage flipped and asynchronous learning, differentiated instruction, and virtual learning communities.

- 3. How? (Differentiation):** Differentiation through course content flexibility and universal design are important for a student-centered growth model. No matter what is being studied and from where, students have unique instructional needs to meaningfully build on their current understanding.

Educators and students require tools and supports to target content and lessons based on assessment of prior learning, accessibility, language, and other individual student needs and interests. Educators need to be able to meet each student where he or she is in a granular and timely manner, including through curriculum choice and self-differentiation.

These three dimensions of learning pathway flexibility are not mutually exclusive. Technology-enabled approaches anchored by in-classroom blended learning can provide a cross-cutting tool for flexibility and growth.

Blended learning supports a continuum of pathways:

Research demonstrates the positive impact of blended learning whereby technology is effectively incorporated into the physical classroom to support teaching and learning ([Laura Hesse, UNI ScholarWorks](#)). Increasingly the question is not if but how to apply best practices to scale effective blended models, including through appropriate pedagogy, tools, supports, and professional learning. Blended learning should enable the personalization of learning pathways, differentiation of instruction, leveraging of data, and increased engagement through multiple and integrated modalities and experiences aligned to learning goals and curriculum.

“Blended learning is the engine that can power personalization and competency-based learning.”

[Horn & Staker](#)



D2L commissioned a survey in January 2021 of 500 parents and their children, and learned that respondents most valued the flexibility and personalization of digital learning. 74% of parents found value in the digital tools that helped adapt course content to the students needs and 72% valued tools that allowed students to learn at their own pace. 84% of grade 4–12 students identified their top value as having the option to find extra content when they needed it.

A continuum of instructional models and modalities from remote to hybrid to blended can provide flexibility to best meet the varied and evolving needs of students and families. This flexibility is important now to accelerate and recover student learning, and systemically to enhance equity of access to and engagement with curriculum and instruction.

Mastery-Based, Personalized Learning

Mastery-based learning (MBL), also known as competency-based learning, is an important approach for both near-term learning recovery and a long-term growth. The MBL model enables students to progress (within a course or lesson) through a tailored learning pathway to reach and demonstrate their mastery of learning objectives.

Why MBL:

- MBL provides a **flexible structure for a student-centered** approach that is so important at this unique time when student differences have grown dramatically and we are open to new methods.
- MBL enables **differentiation and success for all students**, allowing targeted interventions for struggling students and deeper learning for students who are moving at a quicker pace
- MBL targets student needs, and thus **optimizes our most precious resource—time**—both for students and for teachers.
- MBL **encourages student engagement** by making learning goals, progress, and tasks more transparent.

How MBL:

- **Alignment and Transparency:** Learning content, tasks, and assessments are explicitly mapped to academic standards at a granular level. This can make it easier to understand progress and address any gaps for each learning goal.



- **Differentiation:** Students are matched to the most relevant learning content and instructional activities. This creates a more dynamic, personalized learning pathway to identify their strengths and fill gaps before they advance to the next learning goal. Enrichment opportunities are released upon mastery of a given competency, thus advancing all students to success.
- **Assessment and Grading:** Student progress is measured and articulated at the level of the learning objective or academic standard. Assessments can also be delivered flexibly based on release conditions of student readiness, rather than at a fixed time common to all students.

Rolling out a system-wide MBL program is enabled by professional development for educators and integrating the right resources and tools. Technology plays a critical role in scaling MBL by supporting the mapping, data gathering, and differentiation needed to support classroom management and student agency and success.

The shift to MBL can be challenging, but it's something that's already advanced during the pandemic as educators adapted to individual student needs. Our pandemic experiences have also softened the views of policy makers and parents, all of whom are less likely to now equate fixed, single-cohort classroom instructional hours with learning progression.

Deeper, More Authentic Curriculum and Instruction

A student-centered growth model is aided by deeper and more authentic learning, supporting both accelerated learning now and ongoing student success. Core to this approach are:

- Students' mindsets and supporting students' journeys as mindful learners and their intrinsic motivation, executive functioning, persistence, and resourcefulness
- Learning content, tasks, and assessments that are engaging and meaningful both in their relevance to students' experiences and differentiated to reflect their learning progress and gaps

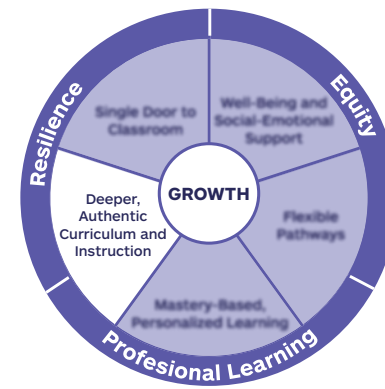
Student disengagement was a problem prior to the pandemic, but it grew in scale and severity due to lack of access, looseness of interaction, and other factors.

“The essence of this powerful learning is fostered by a student’s sense of purpose, meaning, belongingness and desire to make a contribution to society . . . This combination of autonomy, belonging, and meaningful work inspires students.”

Michael Fullan

Engagement requires us to activate deeper learning to foster student ownership and agency:

- **Foster Purpose:** During the pandemic, many students “have found the freedom exhilarating to do things learning wise that they weren’t able to do before” ([Fullan](#)). There is opportunity to make schooling more meaningful to their experiences and interests. As



important is designing instructional activities to be a safe place for students to take risk to help find this purpose.

- **Promote Learning Transparency:** Some schools do not provide learning objective clarity and connection of purpose on the front-end, but instead jump directly into the academics. Translating and clearly articulating learning goals throughout the instructional cycle enables learner purpose, engagement, and progress.
- **Connect Learning to Competencies:** Depth of purpose is built through the six C's of character, citizenship, collaboration, communication, creativity, and critical thinking.
- **Co-develop Learning:** Create an environment in which the teacher becomes a learning guide and activator of a co-designed learning experience in order to build learner ownership and relevance. Prioritize social learning whereby students serve as contributors and change agents, exercising their voice and self-directedness, and thus gaining motivation toward success. Partnerships and community help expand the learning environment beyond the textbook or classroom.

Technology has been first and foremost a mechanism for delivering remote instruction during the pandemic. The opportunity now is to transfer those positive experiences off flexibility and shift from simply digitizing traditional instructional models to redesigning learning to create a deeper and more impactful experience.

Single Door to the Classroom

It's more important than ever that school districts have a one-stop digital teaching and learning hub available for the continuum of virtual, hybrid, and blended in-person learning. In other words, districts need a single door to the classroom.

A robust digital platform facilitates consistency and continuity of learning across time, place, and instructional models and learning modalities. Whether anticipating physical school closure, accommodating student needs and choices, or providing an integrated hub for the range of academic resources and related tools, this single digital door to the classroom is critical for high-performing schools.

This **centralized hub**, often a learning management system (LMS), supports educators, students, and families, and is enabled by the following elements:

- **Robust, Personalized Course Content:** More than anything, students need access to rich learning content anytime, anywhere. This is enabled by embedded teacher tools to author and integrate that content. This provides students with a curriculum anchor that can support differentiation based upon student progress and needs.
- **More Accessible and Universally Designed:** Digital course content and tools should be available to students no matter their physical or learning needs. Responsive and universal design and



accommodations for assistive technologies provide multiple means for content representation and engagement to meet the unique needs of learners.

- **Authentic Tasks and Assessments:** An engaging and inclusive curriculum is more important than ever to help students develop their competencies and become successful. Authentic learning can enable students to more deeply explore and understand concepts in the way that's most relevant to them.
- **Communication and Collaboration:** Social learning and connectedness both create a sense of community. This contributes to learning engagement and motivation and also provides more opportunities for reflection, applied learning, and peer support. Technology can further enhance engagement across time and location.
- **Integrated and Extendible Learning:** Schools can integrate curriculum and instructional supports from a range of sources, including from experts and mentors, content repositories and publishers, and community networks. This learning extension requires the use of data and content standards for coherent integrations and data-informed actions across platforms.

Considerations

Resilience

To be effective, local K–12 school systems need to build resilience to weather not only extreme events like a pandemic, but also to withstand other foreseeable challenges from sources such as economic and technological changes. Resilience is about more than the ability to react, persist, and recover.

A resilient system proactively implements practices so that the arrival of a disturbance does not significantly disrupt the existing routines for continuity of quality learning for all students. Resilience is also a pathway to reimagine the future of teaching and necessary for any high-performing school system.

D2L's [research](#) has found that, to be resilient, any local K–12 system should implement policies and practices that address these five principles:

1. Tight-Loose Integration: A resilient system adopts common learning, technical integration, and process standards and requirements and establishes norms and criteria that guide decisions (i.e., tight standards) while enabling staff to make choices within that framework (i.e., loose process).



- 2. Empowered Schools and Staff:** A resilient system empowers schools and staff with flexibility and authority to be creative and make decisions in a timely manner to best address their unique campus/population needs, within the parameters of districts standards and requirements.
- 3. Redundant and Extendible:** A resilient system values and curates multiple options for meeting needs, is boundaryless, and leverages partnerships to build redundant, diversified, and extendible systems to ensure options are always available.
- 4. Adaptable to Change:** A resilient system is adaptable and evolving by continuously expecting change, identifying potential disturbances, and modifying practices to mitigate the impact of disturbances.
- 5. Authentic and Clear Communication and Feedback Loops:** A resilient system has strong two-way communications to meaningfully understand stakeholder needs, build an authentic and shared accountability, and deliver clear and timely information to enable voice and agency.

Equity

The pandemic exposed and exacerbated disparities based on a range of factors, including students' race, ZIP code, and abilities. Innovations such as expanded digital learning are likely to transform schools even after we move beyond the pandemic and redefine student needs and expectations. This could present both opportunities and challenges for ensuring student equity in the future.

For example, the pandemic created new expectations regarding student voice and agency. Many districts solicited family input to a degree not previously seen, demonstrating how to improve communication feedback loops moving forward.

The pandemic has also made clear that ensuring equity also requires inclusiveness. Many students do not see themselves reflected in their curriculum. Equity requires empathy, recognition of inherent bias, and intentional efforts to diversify curriculum and assessment.

Educational equity can only be adequately addressed when viewed holistically across a range of functional areas, including:

1. Technology: Tools and resources students need for their educational access and success. This may include internet-connected devices to anytime, anywhere access to a robust learning platform with differentiated course content and supports, and assistive technology for better accessibility.

- 2. Curriculum and Instruction:** Teaching and content that's engaging, inclusive, and flexible. These elements can help meet students where they are while driving high standards, including universally designed and scaffolded learning materials across multiple formats.
- 3. Student Services and Wellness:** Deliver 360-degree support needed for students' physical, social-emotional, and graduation-readiness success, including counseling, a safe learning environment, and food security.

Delivering educational equity across these functional areas also requires employing a full range of methods including a focus on access and opportunity, accommodations, and supports.



Professional Learning

The pandemic reminded us of the primary importance of teachers. Educators responded with passion, persistence, and creativity, including shifting to remote and hybrid learning models that most had never experienced to that degree. School systems, for their part, provided new technology training and support, as well as professional development in instructional methods and curriculum design.

The **opportunity now** is to build on our renewed understanding of the need for the most relevant and flexible professional learning, including what, when, and how we provide that support. Increasingly important teacher pedagogy and classroom management needs include virtual and blended instruction, student resilience and social-emotional learning, differentiation, and authentic and project-based learning.

Given the renewed experiences and expectations of an increased use of virtual and blended learning, the role of technology as a platform and as a tool for teachers as learners and instructors is critical. **Teachers in fact are helping lead the way in designing the future of education** and should be supported in doing so.

In reevaluating professional support systems, local school systems should ask the following questions to enhance teacher growth:

- **Is it timely and easily available?** Quarterly professional days and summer workshops will continue, but it's also important to provide ongoing, timely, and convenient access to training content and supports that address new and evolving learning needs. Resources



should include access to asynchronous modules and mentors, rolling mini courses and credentialing, and just-in-time workshops for quickly emerging topics such as the emergency shift to remote learning or to any new platform or pedagogy.

- **Is it relevant and personalized?** Though some professional learning is appropriate for all teachers, or for large cohorts, it's also crucial to offer deeper, targeted development for teachers based on the concepts, curriculum topics, or instructional methods they may be struggling with. Student performance and other data can help discover these needs, and a filterable library of learning opportunities, mentors, and communities enables them to find what they need when they need it rather than pushing them into one-size-fits-all solutions.
- **Does it nurture community and collaboration?** The co-creation of learning is as important for teachers as it is for students. Community is critical for teachers to ask questions, share experiences, and build ongoing networks and dialogue for valuable peer perspectives. These connections are best built both in asynchronous chats and in live discussions with other teachers, mentors, and experts.

Conclusion

A growth mindset can help us meet the moment and embrace changes and challenges as they come. **For students**, it's about building on experiences and abilities to support learning recovery, acceleration, and success. **For schools and educators**, it's about adapting, evolving, and extending to support multiple student pathways and provide continuity of quality learning for all learners, even in the face of disruptions.

We hope this guide provides you with a framework for moving forward that can help address unfinished student learning now and reimagine your schools to support ongoing student success in the future.



About D2L

For over 20 years, D2L has worked to transform the way the world learns, with the belief that all learners should have access to the best possible learning opportunities and experiences.

D2L develops software that makes the learning experience better. Our cloud-based platform—Brightspace—is a leading learning management system (LMS) for blended and fully virtual learning. It's easy to use, flexible, and smart. With Brightspace, schools can personalize the learning experience for every learner to deliver real results. Brightspace is used by learners in K-12, higher education, and the corporate sector, including the Fortune 1000. Learn more about D2L for schools, higher education, and businesses at [D2L.com](https://d2l.com)



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