



MASTERY  
TRANSCRIPT  
CONSORTIUM™

mastery.org

# THE JOURNEY TOWARDS MASTERY LEARNING

THE STEPS AND STAGES TO MASTERY CREDITS  
AND THE MASTERY TRANSCRIPT

JOURNEY  
TOWARDS  
MASTERY  
LEARNING



Purpose & Vision



Graduate Profile



Learning Model



Alignment



Sustainability

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# Introduction

HIGH SCHOOLS PLAY A CRITICAL ROLE IN OUR SOCIETY: preparing all students for the dynamic and evolving worlds of college, career, and life. Being prepared requires more than proficiency in reading and writing. It requires a deep sense of purpose and self; skills for lifelong learning; a solid foundation of academic knowledge; and the ability to apply skills to meaningful challenges and opportunities. It means being able to adapt to changing social, economic, and civic contexts, and having the skills to contribute new ideas and solutions to global challenges.

Creating learning environments that prepare all students with these competencies and capacities can be deeply exciting for students and teachers alike: it can mean cultivating engaging, applied and integrated learning connected to the real world, allowing students to lead their learning and explore their passions, and emphasizing the habits of mind and work that allow for lifelong learning. But it can also be deeply challenging.

Teachers and school leaders who strive to cultivate innovative school models that create personalized opportunities, interdisciplinary projects and deeper learning that prepare students for their futures currently operate in a system that over-values ranking. Students have to navigate summative assignments and tests, grades, and the grade point averages (GPA). Teachers and leaders today are pulled between doing what is right for students to learn and what is required to pass tests, secure scholarships, and gain admission to colleges and universities.

What is the result when ranking is valued more than learning? High schools struggle to support authentic learning experiences, improve college and career readiness, and close achievement gaps. Students may become disengaged from their learning. They struggle in the transition to higher education,<sup>1</sup> and upon earning a degree they find themselves unprepared for the evolving world of work: unemployed or underemployed on the margins of a changing economy.<sup>2</sup>

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## The MTC Theory of Change

Frustrated by the constraints and obstacles to learning that are embedded in the traditional school model, districts and schools are turning to another option: mastery learning (also referred to as competency-based education or proficiency-based learning). With mastery learning, schools are designed to optimize learning, support interdisciplinary curriculum and enable personalized pathways. The Mastery Transcript Consortium™ (MTC) strives to support and accelerate this shift by playing one specific and vital role: realigning the path from high school to college.

1 Butrymowicz, S. (January 30, 2017) Most colleges enroll many students who aren't prepared for higher education. Retrieved from: <https://hechingerreport.org/colleges-enroll-students-arent-prepared-higher-education/>

2 Mourshed, M., Farrell, D., & Barton, D. (2013). Education to employment: Designing a system that works. McKinsey Center for Government.

The relationship between higher education and high school is troubled. Institutes of higher education signal to high schools what matters most to them through their primary admissions requirements: course grades, GPA, and test scores. Many institutions of higher education recognize these as reductive and limited measures of student learning. Nonetheless, they continue to rely on them as the safest predictors of success in college, not necessarily of student potential. High schools pick up on higher education's signals and use them to make key decisions about what they teach, how they teach, and what they value as learning. Using course grades, GPA and test scores as the primary means of translating students' experiences to colleges and universities, high schools are incentivized to organize learning within core content areas, use letter grades and units of time to capture what students have learned, and reduce students to a single standardized number. These actions limit the learning that students experience, fail to cultivate and honor students' diverse skills and abilities and, too often, graduate students who are not ready for college and career.

There is one tool that plays an outsized role in maintaining this troubled relationship: the high school transcript. The traditional high school transcript is the single most significant point of connection between high school and higher education. High schools design transcripts based on what they understand that colleges value, and it limits the learning that students experience by reinforcing grades, reductive averages, and content-specific, time-based learning. The traditional high school transcript holds in place a broken system in which college admissions drive the nature, shape, and content of high school education, preventing innovation, impeding holistic preparation, and perpetuating equity gaps. But where some see a barrier, MTC sees an opportunity.

MTC is reinventing the high school transcript in order to help more high schools make the shift to mastery learning. The MTC theory of action describes how we pursue this work, using three critical levers for change.

1

Build a **Mastery Transcript** that authentically and holistically captures student learning, progress, and interests.

2

Create a networked innovation space where **High Schools** can use the Mastery Transcript to catalyze and support redesign.

3

Engage **Higher Education** institutions who will adopt the Mastery Transcript as a catalyst for rethinking admissions and mobilize their peers to do the same.

This paper describes MTC's second lever for change: creating a networked innovation space to help high schools unleash innovation and accelerate their progress on the path toward mastery learning. Specifically, this paper is about how MTC supports schools along the journey toward mastery learning. (Learn more about the strategies of the Mastery Transcript Consortium™ in the paper [Getting Our Signals Straight for Students.](#))

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## Mastery Learning

Mastery learning prepares all students to thrive in college, career, and life. It is deep and enduring learning that can be applied across context and time to have meaningful impact in the classroom, the workplace, and the world. It is preparing all young people with the enduring knowledge, lifelong skills, and critical dispositions to succeed on a path of their choosing. Mastery learning is the beginning of a lifelong pursuit of passion and purpose.

The transition to mastery learning challenges the status quo. In particular, schools that make this transition confront and address three shortcomings of the traditional system. First, they recognize that students need to gain deep understanding of foundational content and concepts and how to apply those knowledge and skills, rather than simply prioritize memorization to pass tests. Second, they commit to help each and every student master the knowledge and skills they will need for the next step in their studies, rather than accept a bell curve in which some students thrive and others fail. Third, they design learning environments and experiences to celebrate and accommodate those students who are historically on the margins, rather than relying on routine practices that perpetuate outcome and opportunity gaps. Committing to these shifts is the foundation of the shift to mastery learning, and to ensuring that all students are learning, growing and advancing.

Mastery learning encompasses the elements of culture, structures, and teaching that allow students to experience and demonstrate mastery. While mastery learning can look very different in schools based on their context and community, it is generally characterized by certain common principles. These principles are grounded in research on learning, motivation, and development.

## In mastery learning,

### Learning is:

- **HOLISTIC<sup>3</sup>**  
Mastery learning emphasizes the whole child. Teaching builds cognitive, social, and emotional skills and prioritizes wellness in mind, body, and spirit.
- **AUTHENTIC**  
Mastery learning emphasizes deep engagement with meaningful skills and bodies of knowledge. Learning is relevant and applied.
- **STUDENT CENTERED**  
Mastery learning responds to each student's needs and strengths, and providing timely differentiated supports to help each student progress toward mastery.

### Learners are:

- **EMPOWERED<sup>4</sup>**  
Learning is carried out by the learner. Learning engages students' voice and choice. Learning builds student's skills for self direction and self regulation.
- **MOTIVATED<sup>5</sup>**  
Mastery learning develops intrinsic motivation by giving students opportunities to experience competence, connection and autonomy.
- **CONNECTED**  
Learning connects to students' lives, passions, and future goals. Students have opportunities to co-design learning experiences and pathways that are meaningful to them.

### The focus is on:

- **EQUITY**  
Mastery learning works to achieve greater equity— to address and rectify structural inequalities in our education system — by providing students with the resources they need to succeed, prioritizing cultural responsiveness, and directly addressing personal and systemic bias.
- **MASTERY**  
Mastery learning ensures that students actually learn what is expected so that they are prepared for the next step in their learning. Learning gaps are addressed, not allowed to accumulate. Instruction, support and time are differentiated to ensure that all students, at all levels, have the opportunity to expand their knowledge and skills.
- **CONTINUOUS IMPROVEMENT**  
Schools and districts commit to continuously evolving to ensure all students can succeed. Improvement is driven by student needs at all levels.



3 Dumont, H., Istance, D. & Benavides, F. (2010). Nature of learning: Using research to inspire practice. Organisation for Economic Cooperation and Development. Retrieved from [https://www.keepeek.com/Digital-Asset-Management/oe.cd/education/the-nature-oflearning\\_9789264086487-en#page1](https://www.keepeek.com/Digital-Asset-Management/oe.cd/education/the-nature-oflearning_9789264086487-en#page1).

4 Dumont, H., Istance, D. & Benavides, F. (2010). Nature of learning: Using research to inspire practice. Organisation for Economic Cooperation and Development. Retrieved from [https://www.keepeek.com/Digital-Asset-Management/oe.cd/education/the-nature-oflearning\\_9789264086487-en#page1](https://www.keepeek.com/Digital-Asset-Management/oe.cd/education/the-nature-oflearning_9789264086487-en#page1).

5 Toshalis, E. & Nakkula, M. (2012). Motivation, engagement and student voice. Students at the Center. Retrieved from <https://studentsatthecenterhub.org/wp-content/uploads/2012/04/Motivation-Engagement-Student-Voice-Students-at-the-Center-1.pdf>.

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## The Mastery Transcript

The Mastery Transcript is an interactive digital transcript that highlights mastery of content, interdisciplinary skills and personalized pathways. Instead of a list of courses and A-F grades that poorly represent what a student knows and can do, it represents mastery credits: substantiated demonstrations of knowledge and skills necessary for success in college and career. Unlike traditional grades and courses, mastery credits are evidenced authentically through balanced systems of assessment across every stage of a student’s high school journey, both inside and outside of the classroom. Grounded in mastery credits, the Mastery Transcript tells a story about a student: who they are, what they have learned, what they love, and who they want to be. The mastery credit is the foundation of the Mastery Transcript. Together, their power is not only in what they communicate, but also what they reinforce and sustain: mastery learning that is deeply personalized, student driven, based in authentic engagement, and designed to educate the “whole student.”

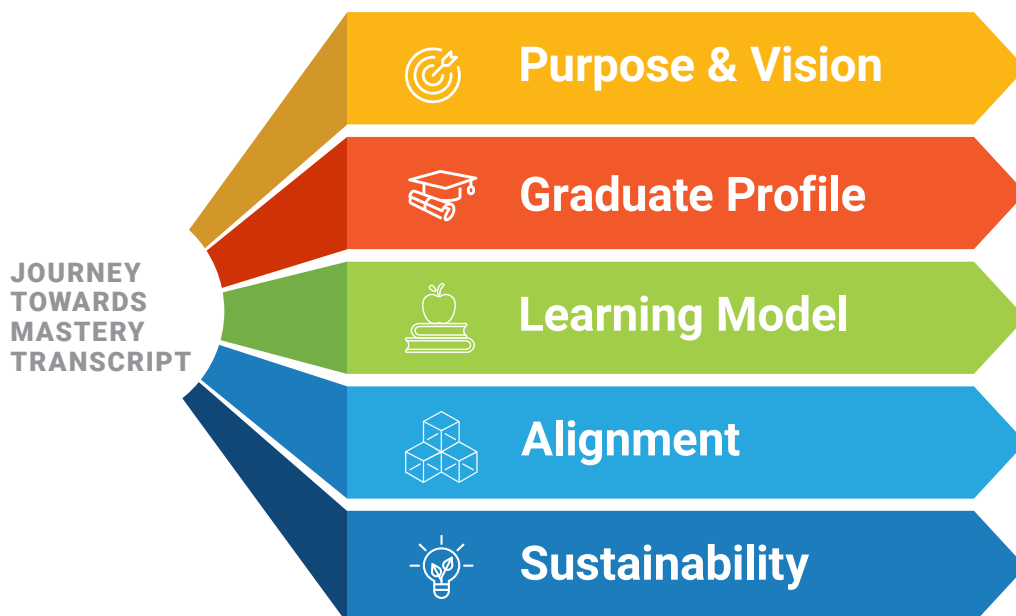
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“Students owning their Mastery Transcripts will be a game-changer. Earlier, a transcript was a thing that happened at school – you went to school and it was just there. Now I have to think about my story – how am I telling my story?”

ANGELIQUE BYRNE, PATHWAYS

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Adopting the Mastery Transcript is a key step in each school’s journey. Schools need to have core elements of mastery learning in place in order to effectively communicate student achievement through mastery credits and the Mastery Transcript. MTC supports member schools through the interrelated processes of designing for mastery and adopting the Mastery Transcript.



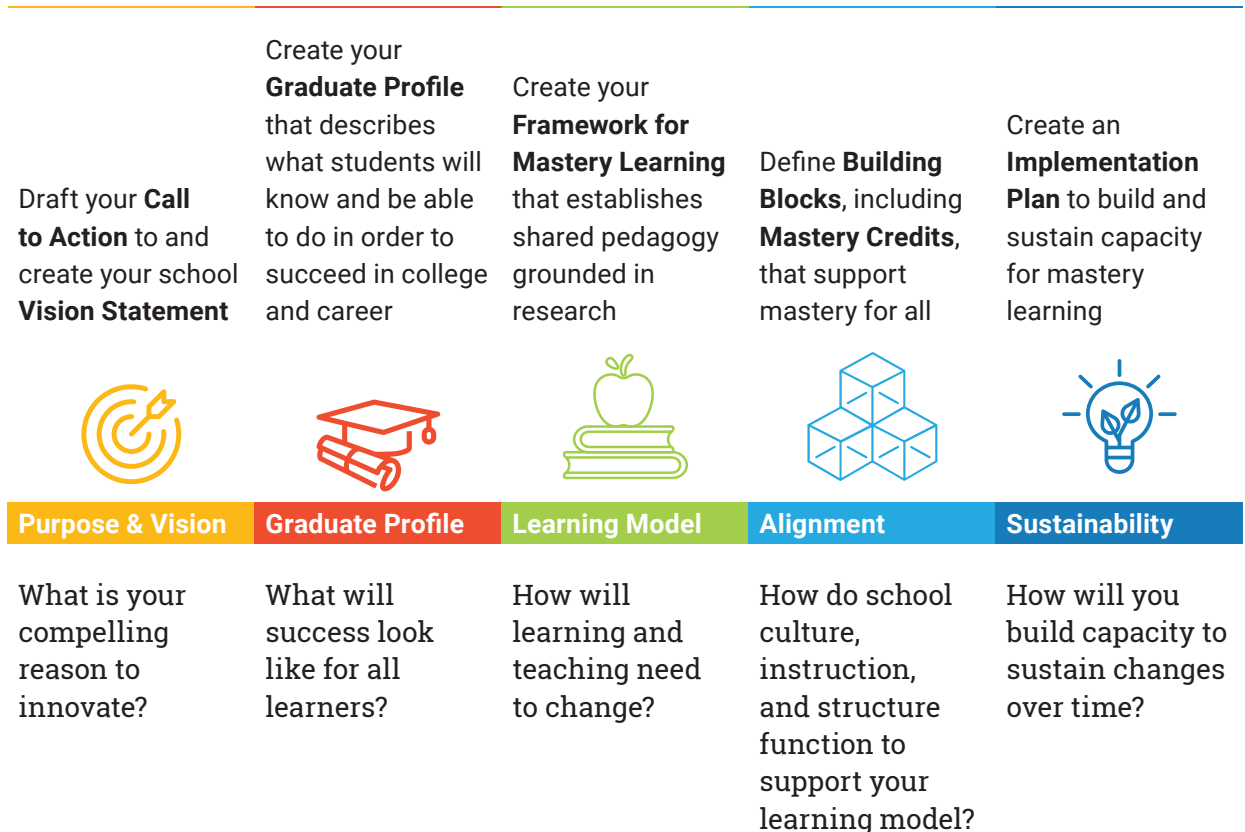
## The Journey Toward Mastery

MTC seeks to connect, support, and guide districts and schools along the journey to mastery learning. No two journeys look the same – each school is different. No one’s journey moves in one direction – we move forward, we take a side step, we go back to try again. Each step generates deeper understanding of mastery learning. Each step builds capacity. And the journey never ends – mastery means continuously learning and improving.

Based on the experience of educators, MTC has identified a common set of preliminary design stages that schools will navigate on the way to mastery learning. Understanding these stages can help demystify the process and encourage schools to start, continue, or reorient along the way. It can help schools understand where they are in the journey, where they are headed, and if there are stages of work where they can return or reengage to overcome challenges or stuck points in their process.



MTC’s five stage framework is a guide to inquiry, collaboration, and iterative design, not a blueprint for change. And, while each school will forge its unique path to realize mastery learning in the context of its community, the essential design elements described here are vital to implementing the mastery transcript and shifting to mastery learning.





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## PURPOSE & VISION: Defining a Compelling Reason to Innovate

What  
is your  
compelling  
reason to  
innovate?

Districts and schools start on the journey towards mastery learning for different reasons and with different capacities, but all good mastery design starts with a clear “why.” Perhaps schools are trying to unleash innovation. Perhaps they are concerned about the stress students are experiencing when caught up in chasing points rather than developing a sense of purpose and a love of learning. Perhaps they are addressing persistent opportunity and achievement gaps. Perhaps they are frustrated that in spite of offering real-world project-based learning, college admissions force them to retrofit that learning into a list of academic courses and A-F grades. Or, they have invested in building a competency-based system only to find that parents, teachers, and students still rely on their GPA as an indicator of success.

Whatever a school’s reason, a vital first step in any mastery design process is clarifying the why for change and articulating a compelling vision of the future. The “why” is a call to action for innovation, the vision is a statement of values and a description of what the future can be for students, parents, and teachers. As schools engage in this work, it is critical to elevate the voices of families, teachers, and partners. Community ownership and investment will guide the school throughout the rest of the mastery journey, inform design decisions, and orient the school through difficult decisions down the road.



**Mastery Design Essentials**  
→ Community-Driven Vision

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“We came to the idea behind Mastery Transcript really authentically. When we started to change the type of work that we asked our students to do, it fundamentally changed the way that we reported out on it and assessed student growth.”

**BRAD DROKE, MOUNT VERNON INNOVATION DIPLOMA PROGRAM**

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## GRADUATE PROFILE: Creating a Vision of Success for all Learners

What will success look like for all learners?

Mastery learning schools recognize that students will need a broad set of knowledge, skills and dispositions to succeed, and that all students are capable of demonstrating these competencies with the right supports. In this paradigm, the graduate profile is the north star: it articulates the knowledge and skills that students will need not only to graduate from high school, but also to thrive in college and career. This is a departure from the traditional system, where graduation requirements are limited to satisfactory completion of course requirements, as dictated by a district and informed by college admissions. Mastery learning schools embrace bolder expectations for students, and all other design elements flow from this vision of success.

Districts and schools will design graduate profiles that reflect their own contexts, communities, and values. Nonetheless, there is a lot we know from research about what students need in order to be successful. Students need so much more than basic literacy and numeracy, and so much more than broad coverage of academic content. They need transferable skills that enable lifelong learning. They need deep understanding of key concepts, applied across multiple content areas at multiple points in their learning trajectories. They need knowledge of themselves, a sense of personal purpose, and capability for self direction.<sup>6</sup>

When districts and schools define graduation expectations, they can then create what is called the common learning framework. The common learning framework is the set of learning expectations used to define what every student should know and be able to do organized by grade-level standards or performance levels. Developing common understanding of grade level targets allows teachers, students, and families to collaboratively and transparently support students along their personalized pathways to graduation.



### Mastery Design Essentials

- Graduate Profile
- Common Learning Framework

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<sup>6</sup> Turnaround for Children, Building Blocks for Learning. Retrieved from: <https://www.turnaroundusa.org/what-we-do/tools/building-blocks/>



How will learning and teaching need to change?

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## LEARNING MODEL: Clarifying How Learning and Teaching Will Change

When school communities create a graduate profile and common learning framework, they commit to ensuring all students develop the broad knowledge and skills that are required to graduate, and to providing rich learning experiences that allow students to engage with and ultimately demonstrate the full depth and complexity of these competencies. Put differently, schools realize that traditional, one-size-fits-all approaches to teaching are inadequate if we expect all students to be truly prepared for college, career, and life.

Mastery learning schools have instructional approaches and systems of assessments that are based on the learning sciences. Research on learning emphasizes learner agency and ownership<sup>7</sup>. Agency is not an abstract concept, it is a set of skills that students develop over time including self-regulation and meta-cognition. The research on learning also calls for authentic engagement and intrinsic motivation,<sup>8</sup> social emotional wellness and relational support, attention to information processing and memory, and cultural competency. In addition, mastery learning is oriented toward deeper learning by emphasizing the application and transfer of knowledge and skills through project-based, inquiry-based, expeditionary, and real-world learning. The systems of assessment are fully aligned so that students receive productive feedback and opportunity to show what they know through performance tasks and performance-based assessment.

The power in a pedagogical framework is that it is shared: that teachers, students, and families understand and feel ownership in “the way learning happens in our school.” Teachers will draw on a range of instructional practices based on their professional judgment of what will be most effective in helping students learn. With enough commonality in their practice teachers can more easily collaborate and support one another’s growth.



### Mastery Design Essentials

- Common Pedagogy Framework
- Systems of Balanced Assessment

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7 Dumont, H., Istance, D. & Benavides, F. (2010). Nature of learning: Using research to inspire practice. Organisation for Economic Cooperation and Development. Retrieved from [https://www.keepeek.com/Digital-Asset-Management/oecd/education/the-nature-oflearning\\_9789264086487-en#page1](https://www.keepeek.com/Digital-Asset-Management/oecd/education/the-nature-oflearning_9789264086487-en#page1)

8 The science of learning. Deans for Impact. Retrieved from [https://deansforimpact.org/wp-content/uploads/2016/12/The\\_Science\\_of\\_Learning.pdf](https://deansforimpact.org/wp-content/uploads/2016/12/The_Science_of_Learning.pdf)



How do school culture, instruction, and structure function to support your learning model?

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## **ALIGNMENT:** **Ensuring Culture and Structures Support Mastery Learning**

In quality mastery learning schools, culture and structures function together to support and sustain mastery learning. Creating this alignment is a process that happens over time, as pieces of the system are implemented, refined, and connected.

Mastery learning schools enact systems to provide timely and differentiated support and ensure transparency. Ensuring all students advance to mastery means creating strong systems and structures for providing each student with the right support at the right time. This requires data to know where students are and how they are progressing, flexibility to adjust instruction and supports, and adequate resources to match students' needs. Mastery learning schools run on transparency: the powerful commitment to ensure that teachers, students, and families know where students are in their learning and what they need to do to progress. Putting transparency into practice requires the introduction of mastery credits that certify what students know and can do. Strong learning management and student reporting systems help schools to meet every student's needs. With information on how students are progressing, mastery learning schools continually adjust instructional and personal supports, resources, staffing, scheduling, and more.

Mastery schools don't just give lip service about equity, they put systems and structures in place to create it. They nurture inclusive school culture. They create greater organizational flexibility to respond to students so that they can be successful in light of their past educational experiences and future goals. This might mean addressing inequitable resource allocation and working with staff to mitigate personal and institutional bias, diversifying staff and leadership, or developing systems that ensure all students can access rigorous and engaging learning wherever they are on their path to mastery.

Unlike traditional schools that are hierarchical, mastery learning is about empowering students and staff to make decisions based on optimizing learning, not on one-size-fits-all policies. Empowerment cannot happen without opportunities for teachers, students, and families to understand the cycle of learning and progress towards learning goals. Principals employ distributed leadership strategies to enhance flexibility and responsiveness.



### **Mastery Design Essentials**

- Mastery Credits
- Timely and Differentiated Supports
- Transparent Learning Management and Reporting
- Equity Framework and Strategy
- Distributed Leadership Structures



How will you build capacity to sustain changes over time?

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## **SUSTAINABILITY: Building Capacity to Sustain Change Over Time**

The shift to mastery learning is a multi-year endeavor, and a change process that saps energy at the outset will not stand the test of time. The two most vital aspects of sustainability are capacity building and effective implementation.

Everyone in the school community – students, teachers, staff, leaders, and families – need opportunities to understand, explore, and adjust to changes put in place during the shift to mastery learning. Aligning the culture of the school with the research on learning is a critical step. Typically, capacity building for teachers starts with strong professional learning communities and includes effective instructional design, calibration on mastery credits, and assessment literacy. Orientation and ongoing personalized, professional development are helpful strategies. Capacity building happens over time; a select group of teachers adopt and/or co-create mastery learning practices and, as they learn, spread and support new practices among their peers.

An enduring student-centered approach requires organizational flexibility and strong systems of continuous improvement. Schools develop data systems to inform improvement needs and track progress, and clear processes and protocols to engage staff in the improvement work.

Effective implementation means phased, thoughtful, and iterative implementation. All pieces of the system cannot be put in place at once, so it is important to articulate implementation priorities over time, charting the path ahead. Often, schools find that elements of culture and common instructional practices are the most important things to get right early on.



### **Mastery Design Essentials**

- Commitment to Robust Professional Learning
- Systems for Continuous Improvement

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## A Powerful Peer Network for High School Redesign

Wherever schools are in this process and however they got started, they will find that redesigning high school to enable mastery learning is not simple and it does not happen in isolation. Therefore, MTC facilitates a networked learning environment that supports member schools along the redesign pathway, with the shared goal of ensuring all students are prepared for college, career, and life. MTC recruits member schools that represent the diversity of high schools in the nation, supports them to learn and innovate, and activates them for broader change.

<b>MTC helps member schools chart their path.</b>	<b>MTC helps member schools connect with like minded leaders.</b>	<b>MTC helps member schools access experts.</b>	<b>MTC helps member schools adopt the Mastery Transcript.</b>
Each school and district will take their own route to redesign. We help schools look and plan their own pathway to a future state.	Transformational change happens in a community of practice. We help schools accelerate, improve, and deepen their work by learning from those ahead of them in the journey and advising those who follow them on the path.	While the pathway to mastery is complex, there are many who have already followed it and now have deep wells of knowledge about design, implementation, and improvement. We help you access the right experts for you, meeting you where you are.	While each school will be different, MTC ensures that schools have the core building blocks in place to ensure the Mastery Transcript can be used well, and to accelerate the shift toward mastery learning



## Conclusion

When the American education public system was conceived and created over a century ago, schools were designed to sort and separate students into categories: those who were bound for further education and elite careers, and those who would work on farms and in factories. Today, schools – and especially high schools – are asked to do something very different. They are asked to prepare all students for the dynamic and evolving worlds of college, career, and life. This will require nothing short of coordinated, transformational change. By joining the Mastery Transcript Consortium™ you can be part of a dynamic network of schools that are leading the way to reimagining high school.



**MASTERY  
TRANSCRIPT  
CONSORTIUM™**

The Mastery Transcript Consortium™ (MTC) is a growing network of member schools who are transforming high school with the Mastery Transcript, a new transcript that supports mastery learning and reflects the unique skills, strengths, and interests of each learner. In the coming years, the MTC hopes to change the way students prepare for college, career, and life.

[www.mastery.org](http://www.mastery.org)

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