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THE BIG WHY:

Tilton School Introduces the Mastery Approach

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Grades.

With one word, Mike Landroche, academic dean of [Tilton School](#), cut to the chase in response to my question, “Why introduce the mastery approach?”

“Grades are debilitating,” Landroche said. “They get in the way of learning. We want to stay focused on growth.” The hope at Tilton School is that the mastery approach, often simply referred to as mastery, will open a door that can lead to a better model of education. Landroche explained, “Once we introduced a standards-based approach to our academic courses, we could see that grades weren’t helpful. The pursuit of grades superseded learning. Grades caused trouble all through the school.”

Tilton shifted to standards-based instruction and assessment 12 years ago. Specific learning targets based on content standards are consistently used in all academic courses. But with the emphasis on the GPA in athletics, college admissions, and scholarships, traditional grading had remained a constant. Landroche shared his hope, “If the mastery approach and the Mastery Transcript catch on, they will validate non-graded approaches. Then we can focus on what is important: learning and growth.”

Escaping from the debilitating effects of grades isn't the only reason Tilton School is embracing what they refer to as the 'mastery approach.' Another reason is that traditional academic courses emphasize content even though there is high agreement that skills are equally or even more important in success beyond high school. Tilton's commitment is to fully develop and prepare students for success. And that means they need to find ways to help students master the wide range of essential skills necessary for adulthood.

Shannon Parker, director of innovation and teaching, added a third reason for the mastery approach. "The traditional school isn't working for anyone. The middle kids are getting lost. The overzealous students are driving themselves hard within a very narrow framework without developing their full potential. And we know that traditional models don't work for students who are struggling academically. We want to develop a model of education that will work for everyone." This is a common theme in conversations with schools moving to some form of mastery learning: the

need to create a model of education that can offer both excellence and equity.

The important thing to remember in reading this series on Tilton School is that their mastery approach is in the early stages of implementation. As Parker repeatedly reminded me, "Mastery is not in the students' vernacular...yet. Over time, faculty will be talking about it more frequently and the ideas will start to be absorbed. It will all make more sense when they start having actual experiences." In fact, Parker doesn't expect students to be fully understanding and embracing the mastery approach until the snow starts to melt. Six months to introduce a set of educational experiences? Most schools I visit, all of them publicly-funded, have long and detailed implementation plans, deadlines, and formal strategies to introduce new practices. Tilton was letting the idea of mastery sink in, be absorbed, make sense experientially. This was my first visit to an independent school, and I could tell I would have to check some of my assumptions about how change happens in schools.



The Mastery Approach Tilton Style



Tucked away a block from Main Street in Tilton, New Hampshire, [Tilton School](#) serves approximately 250 students, of whom 75% live on campus during the school year. As I entered the circular driveway and parked under a tree that was starting to dance with the early golds and reds of a New Hampshire fall, students were rushing, running, and sprinting to the first class of the day. With most kids in shorts and some in sandals, clothing entirely ill-suited for the chilly autumn wind, I was reminded that Tilton, an independent, residential school, had the responsibility and 24/7 opportunity for guiding students into adulthood. Including appropriate clothing.

Shannon Parker, director of innovation and teaching, was hired to guide Tilton School to the next stage of development of its program. She has had a wide variety of opportunities in her life and knows learning isn't a straight line. It's clear she is leveraging all of her experiences and degrees to create and, when needed, encourage change at Tilton.

Tilton isn't transforming their school to a standards-based approach as they have been practitioners of this for over a decade, but they are seeing their mastery approach as adding another layer to a robust learning model. It's important to understand this foundation to academics and adolescent development in understanding why and what the mastery approach is at Tilton.

The Foundation: Tilton School Learning Model

A Culture of Respect and Trust

The first thing to understand is Tilton's culture. It is not a competitive one. They don't rank or compare students. Parker explained, "Our kids do not think there is a finite amount of success. They do not think that their success comes at the cost of someone's else's failure. If I get recognized for Most Valuable Player, it doesn't mean you can't get one too. Everyone is going to make different types of contributions." Students who come from schools with highly competitive cultures quickly understand that they aren't going to be able to have an identity based on being better than other people. Respect comes from discovering and developing their potential.

The second thing is that the nature of being an independent, residential school provides much more opportunity for trust to develop than in the overcrowded, underfunded public schools. Every student has an advisory of between two to eight students. They keep their eyes on what is happening with students emotionally and academically. The student:teacher ratio of 6:1 allows for more one-on-one attention and opportunity for relationships to be formed.

With more than 75% of students in the residential program, adults have many other opportunities that are not defined by the student-teacher relationship to invest in the development of students. Staff coach and do dorm duty. Even day students have rooms in the dorm. Parker explained, "Our job is to build trust. We want our students to understand that these adults care about them unconditionally... and that they can start trusting them. Our job is to love them and give them the discipline they need until they develop their own."

Cycle of Learning: Grade Level Programming

Tilton School expects their teachers to tap into their own creativity, interests, and backgrounds when shaping the learning experiences for students. However, they all turn to Understanding by Design to make sure that the curriculum is taking into account the needs of diverse students.

Tilton also has an explicit four-part learning cycle to help students understand and learn to manage their own learning process. Students learn about all four stages of the cycle — Forge, Ignite, Dive, and Launch — while also spending a full year intensively focusing on each of the stages. For example, freshmen spend their year on Forge, looking at the essential questions of Who am I? and Who do I want to become? Parker explained that freshmen learn to make connections by asking, "What does this have to do with me?" They are coached in developing empathy to be able to connect more deeply with others. They also learn how to validate conversations with others. They receive coaching in the habits of mind and study habits that will help them become independent learners. The goal is for the cycle of learning to become embedded in how students see and engage in the world. (See their website on [Grade Level](#)



[Programming](#) to learn about the other three stages of the cycle of learning.)

Tilton School's responsibility for adolescent development, not just academics, permeates their program. They seek to create personalized programming for students. They want to make sure students are developing a positive self-identity, interests in the world, and habits that will contribute to wellness. For example, one year is dedicated to engaging students in developing interests. Seven times during that year they have three-hour explorations based upon teacher interests. Teachers organize some type of experience based upon their own interests or expertise, and students sign up for what sounds interesting to them. One teacher brought students in to paint while listening to music. Another teacher organized a writing group. Another taught students how to tape their lacrosse sticks. From gardening and board games to playing the guitar, teachers are sharing their passions. They are broadening horizons. They are teaching students how to develop interests that are important to them emotionally, not just because they have to in order to get into college or succeed at work.

Academic Knowledge and Habits of Mind: Standards-Based Instruction

Thirteen years ago, Tilton made the move to standards-based instruction to create transparency about what students were expected to achieve. Students are expected to meet or exceed standards. There is also substantial support, both academic and social-emotional, available during the school day and after hours in the residences to help students succeed.

Academic achievement and habits of mind are also separated. The academic achievement grades reflect what students know and can do:

Content Knowledge, Unit-Driven Understanding, Oral and Written Communication Skills, Critical Thinking and Flexibility, and Creative Engagement and Problem Solving. Habits of mind grades are traits that contribute to success in the classroom: *Intellectual Curiosity, Openness and Engagement, Time and Resource Management, Persistence, Resilience and Patience, Risk-Taking and Self-Advocacy, and Dependability and Punctuality.*

At Tilton, student learning is always in progress. Gradebooks at Tilton stay open the entire academic year, with final grades given at the end of the year with a focus on mode and trend. Students receive plenty of feedback and opportunities for revision and retries. Teachers monitor progress on meeting or exceeding academic standards and the habits of mind. Students can move “not yet” to meet or exceeds any time of the year. It's up to teachers to keep track of where students are in their learning, as at this time there is no student information management system in place to monitor progress.





Students can see grades at the end of the semester. Freshmen don't see academic grades until after the winter break. There are conferences with feedback on how they are doing in developing the habits of mind. Tilton doesn't turn the standards-based progress into a GPA. They'll create an approximation for college applications but they don't aggregate the data. This has helped to keep the focus on learning and not ranking.

Tilton's Mastery Approach

At Tilton School, the mastery approach is described on their website as "an opportunity to grow and showcase your strengths." It is designed for students to "master a skill not simply memorize content." Most of all, the approach is intended to put students in the driver's seat of developing skills and expanding their potential. Tilton is seeking to develop the mastery approach into a distinct customized approach that "incorporates the best educational practices using authentic, purposeful investigations, guided self-reflection, and honest, thoughtful feedback designed for students to assess and grow their aptitudes, skills, interests, and strengths. It is not a one-size-fits-all model. Nor does it occur just in the classroom, but in every aspect of life at Tilton."

The mastery approach is organized around helping students to develop five essential skills: Communication, Critical Thinking and Decision Making, Creative Engagement, Innovation and Design Thinking, and Mindfulness. Students have the responsibility to develop

artifacts that demonstrate their learning. They have until the end of their junior year to earn and demonstrate the foundational credits with opportunity to also develop up to 12 advanced credits. The Mastery Transcript lists all their courses and their mastery credits...without any grades or overall GPA.

Students are expected to develop artifacts of their mastery of these skills in [six areas that are designed to promote self-discovery](#). The six areas of self-discovery are: Academics, Community, Exploration, Intensives, Partnerships, and Wellness. Parker said, "Mastery helps students answer questions such as *What am I good at?* and *What do I know and how can I apply it?*" She pointed out that the same activity or learning experience will mean different things for different students. For example, two students may join the lacrosse team. One student who has never played lacrosse before will consider it as an exploratory experience, whereas another student who wants to play lacrosse in college may set goals that make it an intensive.

It's going to take effort for students to develop the artifacts for a foundational credit in each of the essential skills. They will have to develop six artifacts for communication – one in each of the areas of self-discovery – to earn a foundational credit. Another six for critical thinking and decision-making, and so on. That's a total of 30 artifacts to earn their foundational credits, and even more if they want to earn advanced credits. Students have to do more than just submit an artifact. They have to make a "pitch" to explain what they learned and why it meets the expectations for the skills. A committee, never just one teacher, determines if the student met expectations or not. For each of the skills, consistent through-lines have been developed so that all members understand the expectation.

The artifacts do not have to be developed in classrooms. In fact, the expectation is that

they will be developed beyond the classroom. On the soccer field. In a project in the community. In an internship. As a passion project. The role of the educators is to help create opportunities or mentor students in developing their own artifacts. Think of school as an opportunity generator. (See [Who You Know: Unlocking Innovations That Expand Students' Networks](#) by Julia Freeland Fisher for more on the role of schools in creating social capital.) To help develop independent learning for students requires teachers to tap into their networks. Parker also taps into Tilton's alumnae and builds relationships with the community.

Parker explained the value of the mastery approach. "Last year I taught engineering," she said. "One of our tasks was to build a physical platform. Students set to work and came up with plans. However, it became a very different project when I connected them with structural engineers. Students were expected to share their plans to get feedback. Suddenly, their platforms got a lot better. Not just a little bit better. They got a lot better. They started worrying about structural integrity, ground percolation and placement. They started making sure the platforms would meet standards for industrial strength. It was the connection with the real world, with real expectations, that made this a high quality learning experience. It was when it became authentic that the learning took off."

Tilton sees the Mastery Transcript as a critical tool for their Mastery Approach. They are determined not to let the Mastery Transcript slip into the transactional nature of traditional education, with students submitting assignments or taking tests in return for a grade. Parker explained, "We want our students to be able to narrate their apex toward their potential. Mastery is about their understanding of themselves, what they can do, and what they are learning. It is being able to tell their story about how they are building the skills they are going to need in the adult world."

Parker said, "The driving force of the economy is self-employment, entrepreneurship, and being able to catalyze opportunity. We want our students to be able to see and develop opportunity. We want them to be prepared to take charge of their lives."

Putting it All Together

The message at Tilton is clear: there are multiple types of knowledge and skills that students need to learn to be successful in their lives beyond high school. This includes academic content knowledge, habits of mind, essential skills, and six areas of self-discovery that are important for adulthood. Different learning progressions, instructional approaches, and assessment strategies will be used for the four different strands. Each of these areas are monitored carefully with different methods for marking progress and guiding students toward excellence (i.e., grading).

Tilton is sending a wholistic message to students that becoming a successful adult is more than just getting a high GPA for academics. Academics is just 1/6th of self-discovery. Think about that. Tilton is saying these other five areas of self-discovery are just as important as academics. This is causing a ripple throughout the school. Parker noted that the mastery approach is challenging teachers. "Teachers love school. They value school. They value academics. They love shaping a curriculum because they did well themselves in school. They revel in it. And when you are surrounded by other people who did well in school and love academics, it is very easy to make the assumption that it is the same for everyone. But, of course, most learning doesn't take place in the classroom. Mastery forces all of us at Tilton to look at what we are teaching between 9 and 3 and find ways to connect it to the world outside."

Tracking Progress and Demonstrating Mastery at Tilton School

One of the things you'll see and hear among staff and students at [Tilton School](#) is high levels of respect and trust. Of course, the two go hand in hand; it's hard to have one without the other. It's this foundation of trust that allows people to respond to my questions about how the mastery approach would be implemented with, "I don't know. We'll figure it out." One of the big things that will have to be figured out is how students and teachers will track progress on the multiple sets of knowledge and skills students are expected to learn: habits of mind, academic content, essential skills, and wholistic self-discovery. The other is to eliminate the harmful effect of grades in communicating achievement.

Of course, as Shannon Parker, director of Innovation and Teaching, pointed out, independent schools have more leeway in the change process. She reflected, "The volatility of public discourse these days makes it difficult for public school leaders to simply say, 'We'll figure it out.' We have the luxury of being able to explore, test, and adjust quickly. Failure isn't a crisis. It helps us to learn and do better the next time."

Assessing Mastery Without Formal Assessments

Tilton doesn't plan on using formal assessments in their mastery approach. But that doesn't mean that faculty won't be assessing student learning or giving feedback. Students are going to be expected to meet performance standards for five essential skills. They will all be expected to earn the foundational mastery credits while having the opportunity to pursue advanced mastery credits. The trick is going to be building up a shared understanding of what

the performance level for foundational and advanced credits is going to mean and ensure that it is shared with students.

The mastery approach at Tilton starts with the assumption that students are in charge of their own story. Parker emphasized, "At the end of the day, it will be the kid's responsibility to reach mastery and to tell their own story about what they did to reach it. Teachers are there to help open up opportunity and give feedback. We are there with the students every step of the way, but it's their skills and their future."



What will teachers be looking for in giving feedback to students? One of the qualities is integrity between the artifact and the pitch; the artifact demonstrates the skill and the pitch is the explanation of why it justifies earning credit for it. Is there integrity in what students say they can do and what the artifacts show? Teachers are going to have to be on the lookout for when the 'pitch' or the way the student describes the skill development is different than what is being demonstrated by the evidence. This is tricky territory. It's easy for bias to sneak into assessment. If, after presenting their artifact, the teachers decide a student didn't reach mastery and didn't earn the credit, they will need to be clear whether it was because of the pitch or the artifact. It is going to require an exploration — let's call it a co-exploration — with the student about the learning experiences, the level of performance they wanted to reach, and the potential problems of over-selling or under-selling the skill level.

Tilton wants to make sure there is a deep understanding of what it means to master the essential skills through dialogue, experience, and reflection. One of the things they know they need to do is engage faculty in "authentication" or a calibration process so that there is a shared understanding of what it means to master the skills.

They also want to avoid making the mastery approach transactional. They want to avoid bureaucratizing the process. In the conversation with Parker, we talked about the trade-off between institutionalizing expectations of mastery through formal tools and processes and keeping the understanding of mastery alive through dialogue and common experiences of looking at student work. Certainly, the size of Tilton allows authentic dialogue about mastery among teachers and students. But that will be more difficult in larger high schools.

We know that anything that is formalized in a bureaucratic system risks being turned into a checklist or linear path of gates that every student is expected to pass. However, having the adults be the keeper of mastery through dialogue alone bears risk in failing to make the expectations transparent. This can impact motivation. First, it reduces autonomy. Students are reliant on teachers to tell them if they are reaching mastery. Second, if there is bias in the system or educators that students encounter along the way, there is a risk of the system not feeling fair. That can lead directly to disengagement.

Is there a right answer? I don't know. However, there are two compelling reasons to lead toward transparency of expectations.



First, research on learning suggests that transparency is going to be important for building a sense of autonomy and even a sense of purpose. Seeking out a teacher's approval without knowing what success looks like means I'm doing thing for the teacher, not for my own pursuit of excellence. Second, given where we are in our efforts to unlearn the racism and classism and the culture of ranking that has historically shaped our country, communities, I think I'd lean toward erring on the side of transparency. It's a powerful weapon to fight bias, and we need all the help we can get.

What I do know is that Tilton School will figure it out.

Tracking Progress

With multiple areas of knowledge and skills for students to develop over their time at Tilton, it will become increasingly important to find a way to track progress. Parker noted that in the short run, there are options such as Canvas. However, the products currently available are limited because they are too transactional. She explained, "The developers of the student information management systems rarely understand the dynamic and relational process of learning." Thus, Tilton is figuring out how to track and communicate learning step by step.

Monitoring progress on habits of mind supports the feedback loop to students with narrative, not grades. It begins with student completing a self-assessment. Students then request other students or faculty for review of their self-assessment. At any point, they can upload it into the transcript.

Teachers determine student academic progress based on standards with three options: not yet, meet, or significantly exceeding (SES). The grade book remains open for the school year with opportunities for students to revise and re-submit student work

any time until the end of the spring semester. Tilton creates a cumulative grade at the end of the year through mode and trend. However, the GPA is never used. It's up to teachers to monitor student progress and ensure students are accessing effective support toward meeting standards.

The Mastery Transcript will be the tool for students to present their mastery credits in the five essential skills. However, the Transcript isn't designed for tracking progress. Parker remarked, "No one system is going to do everything for every school given all the different philosophies and approaches." Her primary concern is that progress needs to be monitoring both depth and breadth. She is working with Software of Change to develop a learning management system that offers a "heat map." It will be able to show how students are developing habits and essential skills. Each skill will be a different color. Every time a kid attempts a skill, the surface area expands. The darker the hue, the greater depth of their skill.

Preparing for the Mastery Transcript

Parker explained that being one of the beta sites for the Mastery Transcript is important to Tilton. By helping to design the Mastery Transcript with the other 17 schools, Parker has had an opportunity to have input to better align it with Tilton's approach such as listing classes. They have also been able to adjust to the design of the Transcript early on. For example, they had to clarify in their Mastery Approach how to differentiate between foundational credits and advanced credits for the five essential skills: Communication, Critical Thinking and Decision Making, Creative Engagement, Innovation and Design Thinking, and Mindfulness. This will require more artifacts from students as well as input from Tilton's staff to differentiate levels of performance in these skills.

No matter how much we all agree that the GPA is a dead-end and is constraining the ability of high schools to help all students learn, there are always going to be fears, doubts, and questions about alternatives. The Mastery Transcript is no exception. Parker's primary question is how college admissions staff will make judgments about depth and breadth of skill development.

- Will college admissions staff understand how the Mastery Transcript shows the depth and breadth of what students know and can do? Certainly, the traditional transcript fails to do this in its list of courses. Admissions staff always have to take the step to understand the context of how courses are organized and what level of challenge is expected before they can understand what a GPA means. Did students take advantage of the most academically challenging courses or learning experiences? Or were they selecting easier courses in hopes of getting higher grades? What will be needed to help admissions staff make similar assessments to understand the learning experiences offered by schools within the Mastery Transcript?
- Students will be able to include three links to artifacts within the Mastery Transcripts. Will that provide an adequate snapshot of the breadth and depth of what students know and can do? Will college admissions click and move on, or will they take the time to look through the artifacts? How will they compare artifacts that represent

deeper learning to assumptions about the rigor of Advanced Placement? Will admissions staff understand that AP is primarily capturing comprehension and analysis of a contained set of knowledge without any deeper learning experiences that require students to apply knowledge?

The Mastery Transcript Consortium is laying the groundwork to ensure colleges know about and can interpret the Mastery Transcript. Tilton, like other schools, will also prepare a school profile and description of their mastery credits for college admissions staff. Finally, students will be able to choose which transcript they want to use.

Parker does worry about the willingness of the NCAA to accept the Mastery Transcript. Sports are a big part of the Tilton experience, and many students enroll as a way of building their skills to join collegiate teams. Getting the NCAA onboard is an important step to fully institutionalizing the Mastery Transcript at Tilton.

Fully understanding both the opportunity and the risks of the Mastery Transcript, Tilton is forging ahead. Parker said, "We are thrilled to be part of developing the Mastery Transcript. However, we aren't going to cry if it doesn't work the first time out. We know that successful design is an iterative process." Parker noted with a smile, "We love being part of the design team. The only time you get to change the sandbox is when you are playing in it."

Mastery Transcript Consortium™ (MTC) is a global network of schools co-designing a new high school transcript that reflects the unique skills, strengths, and interests of each learner — and that supports educators as they deliver personalized, authentic, student-centered learning and prepare students for success in college, career and life.

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