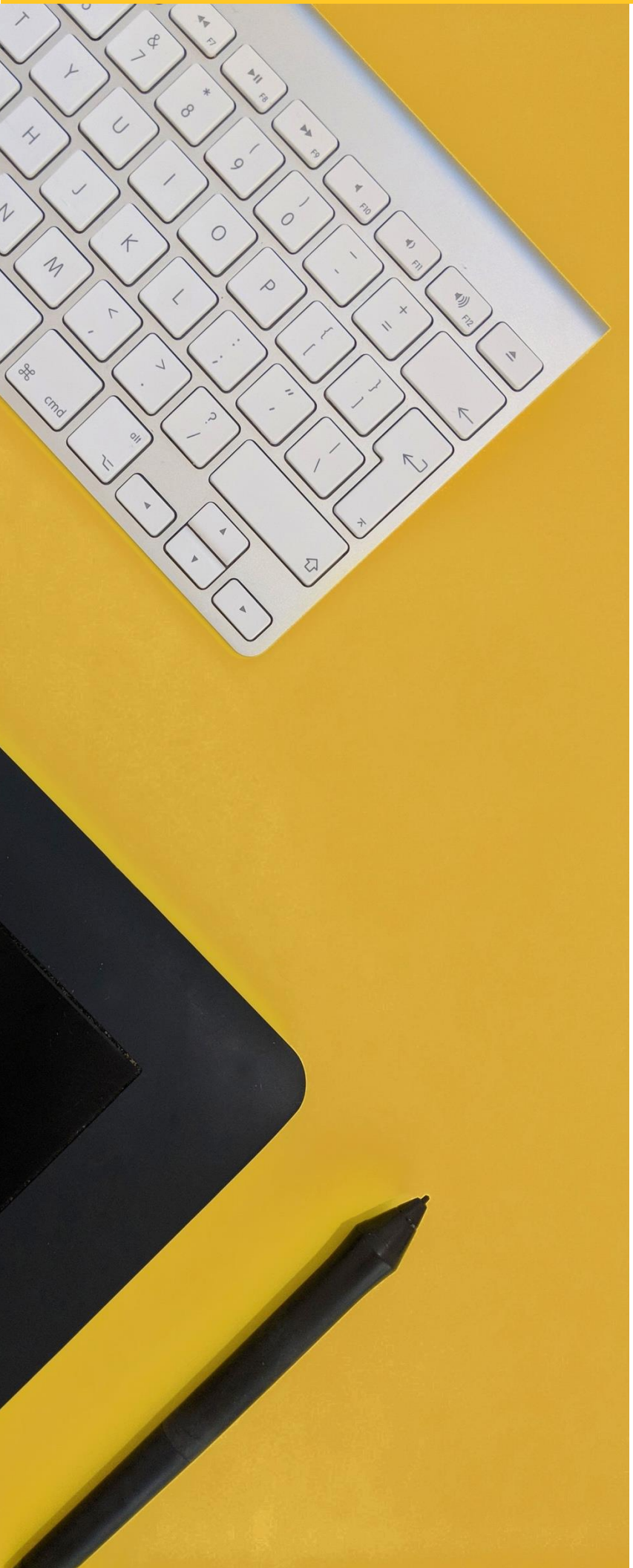


AASA
THE SCHOOL SUPERINTENDENTS ASSOCIATION

TAKING A NATIONAL CALL TO ARMS—WITH A TWIST

How a district built a high-quality STEM school of choice, while giving equal due to social emotional learning

Vancouver iTECH Preparatory

Vancouver, Washington

Houghton Mifflin Harcourt.
The Learning Company™

SPN Successful Practices Network

About the Innovative Successful Practices Project

Dear Educator,

Beginning in 2017, the Successful Practices Network (SPN) and AASA The School Superintendents Association, have been conducting a study of innovation best practices in public K12 systems from throughout the United States, with support from global learning company Houghton Mifflin Harcourt (HMH).

Dr. Bill Daggett has led a team of nationally recognized superintendents, researchers and data analysts to identify systems that are using innovative approaches to put students first by expanding and supporting student learning and achievement. Schools and districts were selected for further study based on a national search conducted by thought leaders and experts at HMH, SPN and AASA. HMH supported this effort by providing research and reviewers as part of its work to partner with school districts on improving student outcomes.

From that study, 25 national Innovative Successful Practices systems were identified based on their ability to demonstrate rapid improvement in student learning and preparedness through innovative organizational and instructional practices.

Each of those 25 systems collaborated with SPN and AASA to host an on-site visit, detailed data analysis and development of a case study. These case studies are intended to provide an accessible and nontechnical overview of each innovative approach that is backed up with data-driven results.

The participating systems include a wide range of geographies, demographics, student population and resource levels. In spite of those differences, each of these systems shares a common mindset that innovation can drive public education with a strong focus on serving the needs of all of their students.

We have been inspired by the lessons learned from these courageous leaders that took risks to think beyond their traditional systems and approaches. It is our hope that this work continues to inspire, inform and support public education leaders in their efforts to prepare students for success both in school and beyond school.

“The world that our children will live, work and interact in will be fundamentally different than the world we all grew up in,” said Bill Daggett, Founder and Chairman, International Center for Leadership in Education. “To prepare them for success in this changing world our schools need to make fundamental changes as well. These innovative districts are paving the way and showing us how to make the necessary changes needed in our schools.”

“At a time when the new school year is beginning across the nation, there is no better time than now to speak out about the value of public education and bring to the forefront the outstanding work being done by our school districts,” said Daniel A. Domenech, Executive Director, AASA.

“It’s important to be imagining how our classrooms and schools can look and feel different in the next decade,” said Rose Else-Mitchell, Chief Learning Officer, Houghton Mifflin Harcourt. “We congratulate these change-makers for creating a culture of innovation and the conditions for future-focused learning designs in their school districts to accelerate student engagement, growth, and achievement.”

Introduction

Vancouver Public Schools' Vancouver *i*TECH Preparatory—a STEM-based, early college school for students grade 6-12—was an innovation in it of itself. It was established in response to the national effort to bring more STEM learning opportunities to more students of all ages. As a school built from scratch, its leaders had the unique chance to conceive a thoroughly modern institution to meet the needs of a rapidly changing and technology-driven world. It was the attention they put on social emotional learning, though, that elevated this new STEM school into an institution of truly leading edge learning.

The Challenge

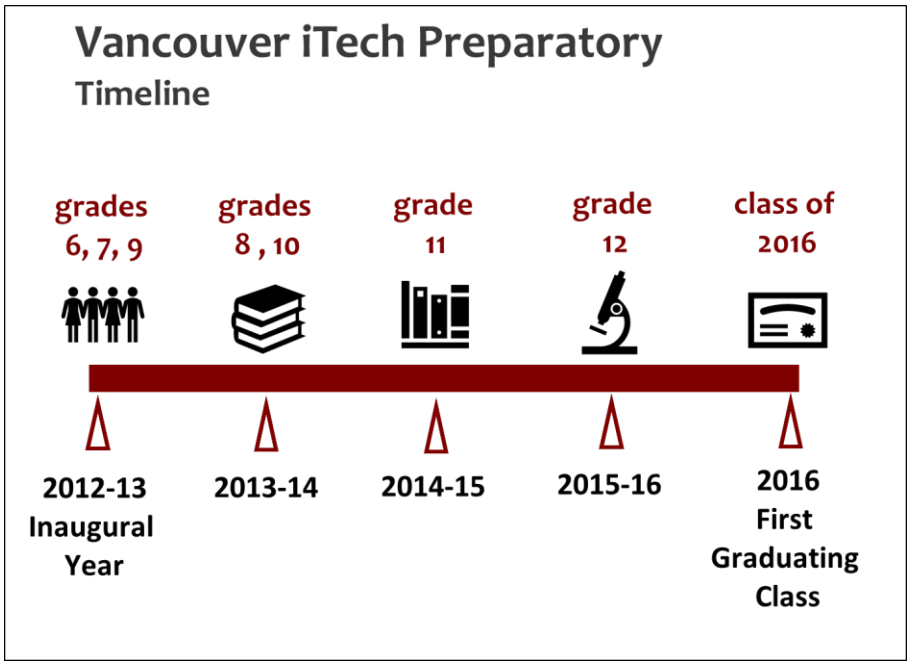
Vancouver, Washington is a thriving small city that sits on the other side of the Columbia River, just across from Portland, Oregon. The Vancouver Public Schools district (VPS) serves 24,000 students in 36 schools or school sites staffed by 3,300 employees. VPS takes great pride in its community and district diversity. An incredible 92 languages are spoken across its schools, and 21% percent of its students come from homes where a language other than English is spoken. Half of its students are eligible for free and reduced lunch. Five thousand are enrolled in magnet schools or programs of choice.

One of those programs of choice is Vancouver *i*TECH Preparatory (*i*TECH). Nearly ten years ago, *i*TECH was born from a challenge. In 2009, the Vancouver Board of Education took President Obama's call to action to expand high quality STEM-based learning opportunities for all students. The school board and district leadership hosted community visioning sessions where they began to conceive a new school where VPS students could engage in a future-focused and pioneering STEM program. With much input from families, staff, and community members, leaders put together a plan for what would become *i*TECH.

The school of choice would serve students in grades 6-12, admitted by a blind lottery. It would be an early college model with an emphasis on STEM and problem- and project-based learning in a technology-rich, 21st-century learning environment. Art and design principles would be integrated into core curriculum, and all students would take Spanish. Importantly, the school's team would not make the mistake of over-emphasizing the technical aspects of a STEM school. Instead, they would take a whole child approach to learning and give equal attention to social emotional learning (SEL).

District appointees rolled up their sleeves and got to work moving this school from vision to reality. Access to college level learning was imperative to their vision. In what is seen as a vital and savvy innovation, the team negotiated with Washington State University Vancouver (WSUV) to designate space in the Clark College building (that Clark College, a local community college, leases from WSUV) for *i*TECH's high school students. *i*TECH's students in grades 6-8 would attend school at the local Jim Parsley Community Center, a building opened under the guidance of a former VPS superintendent with the intention of providing services and activities for local families. The district would provide transportation to both campuses.

Planning continued until the inaugural year of Vancouver *i*TECH Preparatory. In 2012, the first crop of students in grades 6, 7, and 9 arrived at school. Grades 8 and 10 were added in 2013-14, grade 11 in 2014-15, and grade 12 in 2015-16. The first graduates were the class of 2016. Today, *i*TECH enrolls approximately 400 students.



The district worked closely with Clark College to ensure that *i*TECH students had sufficient supports to manage the rigor of Clark's community college level classes (taken for dual credit) as early as their freshman year. This gives many students the opportunity to graduate from *i*TECH with an associate's degree. Once students turn 16, they can take classes at WSUV for dual credit. The district pays for all students' college level classes.

Because *i*TECH's high school students attend school on a college campus, students are automatically exposed the realities and rigors of college level learning. They are building college-ready skills, but with the security and support of a dedicated high school staff. The *i*TECH school counselors have an elevated role. They work with each student to build and manage their scheduling, which can get complicated when college classes at one or both campuses are involved. They're hands-on in offering guidance and soliciting the assistance of colleagues as needed for specific concerns or challenges.

A recent community referendum vote approved the creation of a new 6-12 *i*TECH building on the WSUV campus. Plans for design and construction are underway. The new campus, which will house all *i*TECH students, is slated to open in December 2019.

The Innovation

*i*TECH has achieved its original intent—to offer a truly first-rate STEM school of choice. Six years after accepting its first student cohort, the school is known for delivering a high quality and holistic education. Each year, more students apply to the school lottery and more parents want their children to attend.

Students must earn 32 credits to graduate, 8 more than the district requirement of 24. And they are all encouraged to take college level classes. The school's leaders knew from the outset that for students to rise to meet high expectations and unique challenges, they would have to support them as the whole children they are. SEL was seen as vital to the overall curriculum as its STEM-based components.

When walking *i*TECH's campuses, it's not uncommon to hear students discussing the emotional highs and lows of learning—with each other, with maturity, and with comfort. *i*TECH students understand that when pushing themselves to deepen their learning, setbacks and stumbles are inevitable. To these students, this is ok. It is an indication of the normal process of learning, not something that reveals a deficit in themselves.

An example: Middle schools students were amid the tiny homes project. Their charge was to create and construct models of tiny homes, which they would present to the city commission as solutions to the city's homeless problem.

With little time left to complete the project, a team was seen demolishing their model. Asked why they did this, knowing they would be losing much time, they said that when they realized their model just wasn't working, it had to be scrapped and they had to start over. They would accept the risk of not finishing. This was, they explained, better than turning in a model they did not believe in and did not believe could best serve the needs of the homeless.

How did *i*TECH manage to create a culture where even middle school students feel comfortable with failure? In front of their peers, no less? Even see it as the option of integrity? By never losing sight of SEL, even in a STEM program. Four guiding beliefs drove this feat.

Learning is Emotional: Acknowledge the Authentic Emotion of School
Step one of building a culture of learning oriented towards the whole child is to acknowledge the whole child. The *i*TECH team understands that learning is an emotional pursuit—it has highs and lows. True and deep learning is not always linear or even. It's exciting, frustrating, invigorating, confusing, fascinating, and challenging. *i*TECH's educators make a point to make room for the real emotions of deep learning so that they can help students process, manage, and work through them all. Especially since these fluctuating emotions can feel even more intense to children, who lack the experience of adults to keep them in perspective.

*i*TECH captures this spirit of embracing the emotions of deep learning as *vigor*, a word purposefully both similar to but distinct from rigor. The genesis of promoting vigor was a discussion about how to push rigor and a realization that it too often suggests volume. More

work was at odds with what the team was setting out to do. They wanted students to go deeper into learning, not be laden with yet more assignments. They wanted students to have the time to really think about problems, grapple with them, work through challenges, and arrive at new ideas and original creations. In doing so, they understood, students would experience a range of emotions.

Rigor, then, was seen as a feature of the work they intended to give students, but not its ultimate purpose. Its larger purpose would be depth and making use of the complex thinking and doing that depth demands. So, they stumbled into the awareness that vigor perfectly captures the heart of the kind of learning they hoped to elicit in *i*TECH. Per Dictionary.com:

Vigor:

1. active strength or force.
2. healthy physical or mental energy or power; vitality.
3. energetic activity; energy; intensity.

Vigor encapsulates the vital energy and emotion that go into truly deep learning. It does not conjure a sense of overwhelm, but rather a sense of being a proactive participant in one's learning process. It connotes the strength it takes to think intensely and struggle productively through the rewarding and stimulating act of learning, achieving, and persevering.

It was a no brainer: *vigor*, not rigor. Vigor addresses the whole child; rigor addresses just some aspects of a child. All students, staff, parents, and community members know that the name of the game at *i*TECH is vigor.

When learning is vigorous, emotions are by definition welcome and acknowledged. Stigma around having emotions becomes less of an issue. Students understand they are safe in expressing their ups and downs and comforted knowing they have caring, empathetic teachers there to support them as they process emotions. That students are surrounded by peers going through the same emotions of vigorous learning means they understand frustration does not mean they are any less capable or smart. It means they are normal and that emotions are a normal part of life. It's in learning how to manage them that we begin to tap into and reach for our potential.

Another benefit in a culture of vigorous learning is that conversations around feelings are normalized. *i*TECH educators have found students to be more comfortable engaging in such conversations, which deepens the trust between students and teachers. When there's more trust in these relationships, the students feel more cared for. When they feel cared for, they feel safer taking leaps of faith and risks to go deeper into learning. They are more open to pushing themselves, even if they stumble along the way—well aware that such stumbles and the frustrations that come with them are a natural part of learning.

While students are given plentiful opportunities for vigorous learning, one of the most common ways it unfolds is in letting students have multiple attempts at standards to reach proficiency. Do-overs, re-dos, and retakes are embraced, encouraged, and normalized. Students are aware

that they are being asked to deepen their learning. They are told that deeper learning is more challenging than volume of learning. Thus, they understand why it can take several attempts to master standards when they are asked to learn them in greater depth. They try, try again and again and again to reach mastery of all standards. All the while, they are discussing their emotions and struggles with teachers, who personalize learning to support them, encourage resilience, and keep guiding them towards proficiency.

Problem-Based Learning as a Vehicle to Social Emotional Learning

*i*TECH uses project- and problem-based learning with a focus on science, technology, engineering, and mathematics. Projects are built on Common Core, NGSS, and ISTE standards, and each transdisciplinary project will typically incorporate three or four standards from a range of disciplines. Academically, PBL makes a lot of sense at a STEM school. Science, technology, engineering, and mathematics naturally lend themselves to building, tinkering, experimenting, and creating. PBL also makes incorporating real-world skills and student interests much more accessible. However, it was PBL's natural alignment to SEL that was of most interest to *i*TECH's leaders as they set out to establish vigorous learning in their school.

With a commitment to whole child learning through vigor, PBL was seen as offering maximal opportunities for interaction and collaboration. Students use a broader range of social emotional skills when they are working with others and negotiating team dynamics. Social emotional skills are also more observable in interactions than when students are working alone. In adopting PBL as the primary instructional strategy, *i*TECH expected and anticipated that SEL would be more readily and more frequently accessed.

*i*TECH's team has learned that this is, in fact, true. Their students have to apply interpersonal skills every day. They are constantly presented opportunities to practice the skills that go into collaborations—such as trusting, leadership, delegating, responsibility, respect, compassion, patience, honesty, and adaptability, to name some. And teachers can more obviously see when a student is in need of social emotional intervention or support. *i*TECH's teachers report that PBL allows them to get a much more accurate sense of each student as a whole child than possible with more traditional instruction.

The school devotes two staff meetings per month to discussing student support and wellbeing. Teachers will report if they notice an emotional change in a student or a conflict that warrants intervention. The point of raising these concerns is to determine who on the staff is best positioned to provide intervention or support. Often the teacher who might observe an issue is not as close to the student as is another teacher. To get the best effect of an intervention, they make sure the adult who delivers it is one the student trusts.

Thanks to vigor, SEL interventions are understood to be supportive, not disciplinary. Because *i*TECH places so much value on relationships and puts so much energy into fostering them, students almost always trust that a teacher is there to help them process emotions rather than make them feel wrong or bad. A 27-minute advocacy period is built into students' schedules three times a week. This time allows students to seek help from teachers or work with students on projects. It also designated for teachers to offer social emotional support and interventions.

Vigor, PBL, and SEL Can only Sustain if Grading Evolves

The *i*TECH team quickly realized that the traditional letter-based grading system would not work in their school. Letter grades and averages would never capture the effort, progress, and range of emotional skills students put into achieving deeper learning. Undaunted, the team decided to develop a standards-based grading (SBG) system that could be converted into an ultimate letter grade. They embraced this challenge and accepted it would involve trial and error and an ongoing commitment to improvement and evolution. They felt that had no choice but to innovate how they assess their students' development. It was the only way to optimize and sustain their vigorous approach to PBL and SEL.

The first result of their research and efforts was G.A.U.G.E.: grading for academic understanding, grit, and excellence. G.A.U.G.E. is a rubric-based standards assessment used to ascertain where a student is relative to proficiency for each individual standard. Using the rubric for a specific standard, teachers determine which proficiency threshold a student has most recently reached. There are four proficiency levels, defined by the thresholds, and each is assigned a numerical score: Beginning, 1; Approaching, 2; Meeting, 3; and Exceeding, 4. Please see Appendix 1 for an example of a standard-based rubric.

At the end of a semester, a student will have multiple scores per standard. Scores are never averaged in the traditional sense. Instead, they use a decaying average. Each score is weighted first and then they are averaged so that proficiency and growth over time are captured in the ultimate score.

The decayed average weighs the most recent scores higher than previous scores, as the most recent score will represent the most complicated work for a standard to date. The weight of past scores continues to decay the older the scores become. Initially, *i*TECH weighted the most recent score at 87.5%. In other words, in any decayed average ultimate score, 87.5% of it is reflective of the most recent score given in a performance assessment. The decayed average acknowledges that learning is a process. It also rewards the emotional skills that go into persevering through the vigor of that learning progress.

*i*TECH then needed a process to convert scores to letter grades. To do this, they came up with a conjunctive grading rubric. Similar to their standards rubrics, the conjunctive grading rubric uses threshold of proficiency based on standard scores to determine a single letter grade. The letter grade is based on the number of standard scores above a certain threshold; it also factors in if there are standard scores that show a gap in learning. This approach to grading allows teachers and students quickly to identify and respond to gaps in learning instead of letting those gaps get buried or lost in averaging. Please see Appendix 2 for the conjunctive grading rubric.

*i*TECH is often asked to speak about their innovative approach to SBG. When they do, they give key advice: as you set out to create a SBG system, you have to permit your teams to fail. Building SBG is no small task. It is also relatively new in our school system. Those who attempt SBG are pioneers. And like any pioneer, you have to be allowed to veer off course, make

mistakes, and encounter setbacks. Ultimately, the endeavor to pioneer SBG is worth the failures needed to light the path to success, as SBG can facilitate and support the massive changes our schools must make to align to 21st-century learning needs.

SBG also cuts down on the number of kids who slip through the cracks of traditional grading and start a new grade level unprepared. With SBG, teachers and students alike always know where a student is in their progress towards proficiency in every standard. At *i*TECH, no student struggles with a standard without a teacher knowing and providing support. No student starts a new school year without having mastered all prior year's standards. *i*TECH's SBG offsets the inconsistencies and deficiencies of traditional grading.

Practicing what they preach, *i*TECH's team has made changes to their original G.A.U.G.E. approach as it became clear improvements were needed. They shifted the weight of the most recent standard score from 87.5% to 75%. Feedback and data showed that 87.5% was not giving enough weight to the effort and persistence that preceded the most recent standard performance.

In the first iteration of SBG, *i*TECH used a spreadsheet they developed to calculate decaying averages. Ultimately, many teachers reported this took much time and was too complicated. So leadership found a more efficient solution in JumpRope, a grade-reporting platform. *i*TECH worked with JumpRope to customize the software to their needs. It is a more sophisticated tool that better communicates standards score and grade calculations. This allows students and parents to take a more active role in the student's learning and progress toward proficiency in all standards.

Communication, *i*TECH learned, is pivotal when it comes to SBG. People will initially be confused. And confusion breeds doubt. As *i*TECH began their transition to SBG, they communicated routinely with staff, students, parents, and the community as to why they were making this change and how it would work. They were also available for questions to put minds at ease and begin to make believers of all stakeholders in their bold new vision for grading.

True Whole Child Learning Must Include Everyone

The *i*TECH team understands they cannot be believable purveyors of whole-child learning if they don't prize inclusivity. To teach the whole child is to acknowledge all the needs, emotions, and talents of every child. The objective is to support wellbeing while in school and help students grow into productive, responsible citizens with healthy careers, interpersonal relationships, and community relationships. This work is fundamentally at odds with treating any child as less deserving in any way, particularly less deserving of this kind of opportunity for learning.

*i*TECH strives every day to be an inclusive and diverse environment. Students with disabilities learn in the same classrooms as the rest of the students. All students win entrance to the school through blind lottery—with one caveat to ensure inclusivity. Seats are allocated by zip code density, precluding the chance that some zip codes end up overly favored and others left out.

It is easier for *i*TECH to take measures to ensure inclusive geographic distribution of lottery results. It is harder for them to take these measures in terms of who applies. Yet it proactively seeks to encourage people from all genders, backgrounds, and district schools to apply.

As a true lottery, the school cannot select the same number of girls and boys. What they can do is try to influence more girls to apply. There remains a perception that STEM learning is for boys. When *i*TECH first started, only 27% of its students were female. Today, nearly 40% are. To attract more female lottery entrants, the school takes active measures to break down misguided perceptions. One way they do this is through the Girls Lead the Way program, where current female *i*TECH students lead a robotics summer camp for younger female students from around the district. The school hosts a tea where mothers and daughters visit the campus and engage with its female students on mini STEM projects. The point of these efforts is to show that once girls enter *i*TECH, any intimidation about the curriculum dissolves. Visiting girls and their moms see the current *i*TECH girls thriving, excelling, learning, and loving their STEM education. The hope is that they will begin to see themselves as equally capable of success in STEM.

*i*TECH also wants to make students with a broad range of interests and inclinations—particularly in areas that might not at first glance appear connected to STEM—feel welcome and wanted on their campus. They actively communicate to prospective students that STEM exists across and in all disciplines. As an example, art and design feature prominently in *i*TECH's curriculum because they feature prominently in technology and engineering design. They seek to connect with students with a proclivity for art and design to educate them that their interests would bring great value to the school and could translate into a promising career in STEM fields. Wherever possible, the *i*TECH team strives to correct the misperception that STEM subjects are only technical by showing how they cannot and would not exist without creativity and a rich range of perspectives and experiences.

The Impact

The success of *i*TECH's STEM-based whole-child approach to vigorous learning has been so successful and notable that the Washington Association for Supervision and Curriculum Development awarded it the Whole Child Student Engagement Award in 2015. Its achievements have also earned the school statewide recognition as a STEM Lighthouse School and an Innovation School. The nationally distributed *District Administration* magazine highlighted *i*TECH as an innovative leader in STEM education.

Discussion Questions

1. Do we see SEL as something that can stand in the way of rigorous learning, or something that can enhance and elevate learning and make it more relevant? What perceptions of SEL might be prohibiting our ability to embrace it?

2. Do our students or staff see emotions as something to suppress, be embarrassed about, or be ashamed of? What measures can we take to normalize emotions, help students learn to process them, and better serve the needs of the whole child?

3. Where are we not meeting the ideals of true equity and inclusivity? How can our inclusivity measures improve to make a whole-child approach to learning believable and sincere in our schools?

4. Is our grading system inhibiting the evolution of our learning model to align with 21st-centry needs? Are students starting the new school year unprepared, and might our grading system be a factor? How can we innovate, or at least begin to improve, our grading to fit changing circumstances and student needs?

Appendix 1: Example of a Standard Based Grading Rubric

When assessing a student's standards performance, the teacher determines which threshold the student met and then assigns the student the respective numeral score. When calculating an overall assessment score, the most recent assessment receives a weight of 75%.

This SBG rubric example is for CCSS RL.9-10.3.

Common Core Standard: Analyze how complex characters (e.g., those with multiple or conflicting motivations) develop over the course of a text, interact with other characters, and advance the plot or develop the theme. (RL.9-10.3)

Score	Description	Additional Notes
4	In addition to a 3 score, the student demonstrates inferences and applications such as: evaluate how a character's development is caused by the narrative or changes the narrative evaluate and critique the interaction of characters throughout a narrative evaluate how a character's actions develop or refine the theme in a narrative	A "4" may be demonstrated in the following project assessments: 1. Literary Analysis Final Assessment 2. *May be negotiated*
	3.5 *In addition to applications of 3 criteria, the student demonstrates in-depth inferences and applications with partial success.*	
3	While engaged in grade appropriate tasks, the student demonstrates an ability to: analyze how a character changes throughout a narrative compare and contrast two or more characters' interaction and its overall impact on a narrative explain how a character's actions impact the plot in a narrative	A "3" may be demonstrated in the following project assessments: 1. Literary Analysis Final Assessment
	2.5 *The student demonstrates no major errors or omissions regarding the 2 criteria and a partial knowledge of 3 criteria.*	
2	The student demonstrates no major errors or omissions regarding foundational information: identify a character's traits as developed in a narrative analyze how two characters interact throughout a narrative identify the importance of a character's action in a narrative	A "2" may be demonstrated in the following project assessments: 1. Literary Analysis Final Assessment 2. *May be negotiated*
	1.5 *The students demonstrates understanding of all 2 elements with help and independent understanding of some 2 criteria.*	
1	With help, the student demonstrates understanding of all 2 criteria or some 2 and 3 criteria.	
	.5 *The student demonstrates understanding of some 2 criteria.*	
0	There is no available evidence of student demonstrating skill or understanding.	

Appendix 2: The Conjunctive Grading Rubric

Once teachers have collected multiple scores for each standard and calculated their decaying average in JumpRope, they refer to this rubric to determine how a student's score converts to a letter grade.

Vancouver iTech Preparatory

Definition of the Range of a Student's Work Toward Mastery

Final Letter Grade	60% of *Standard Scores Must be Equal To or Above		No *Standard Scores Below	
A	3.5	In addition to score 3.0 performance, in-depth inferences and applications with partial success.	3.0	The student exhibits no major errors or omissions.
A-	3.5	In addition to score 3.0 performance, in-depth inferences and applications with partial success.	2.5	No major errors or omissions regarding 2.0 content and partial knowledge of the 3.0 content.
B+	3.0	The student exhibits no major errors or omissions.	2.5	No major errors or omissions regarding 2.0 content and partial knowledge of the 3.0 content.
B	3.0	The student exhibits no major errors or omissions.	2.0	There are no major errors or omissions regarding the simpler details and processes.
B-	2.5	No major errors or omissions regarding 2.0 content and partial knowledge of the 3.0 content.	1.5	Partial knowledge of the 2.0 content but major errors or omissions regarding the 3.0 content.
C+	2.0	There are no major errors or omissions regarding the simpler details and processes.	1.5	Partial knowledge of the 2.0 content but major errors or omissions regarding the 3.0 content.
C	2.0	There are no major errors or omissions regarding the simpler details and processes.	1.0	With help, a partial understanding of some of the simpler details and processes and some of the more complex ideas and processes.
C-	1.5	There are no major errors or omissions regarding the simpler details and processes.	0.5	With help, a partial understanding of 2.0 content but not the 3.0 content.
D+	1.0	With help, a partial understanding of some of the simpler details and processes and some of the more complex ideas and processes.	0.5	With help, a partial understanding of 2.0 content but not the 3.0 content.
D	1.0	With help, a partial understanding of some of the simpler details and processes and some of the more complex ideas and processes.	0.0	Even with help, no understanding or skill demonstrated.
F	Does not meet "D" threshold	With help, a partial understanding of some of the simpler details and processes and some of the more complex ideas and processes.		Even with help, no understanding or skill demonstrated.