Quality Principle #3

Nurture a Culture of Learning and Inclusivity

Description

When a culture of learning and inclusivity is in place, students and adults—including those who have been the most marginalized—are respected and empowered to take their place as an active learner within the learning community. Belonging and inclusion are built through intentional structures that strengthen trust and relationships that are then reinforced through rituals and routines. When they are respected and included, students and adults experience optimal conditions for learning and growth. Emotional engagement promotes cognitive engagement: safety and trust enable risk-taking which is critical to productive struggle.

#3 Nurture a Culture of Learning and Inclusivity

Key Characteristics

- *Reflection as an important step in learning.* Reflection is an ever-present routine. Students reflect to build metacognition, self-regulation and habits of success.
- *Growth mindset.* There is shared understanding that intelligence is not fixed and that learning requires effort and appropriate supports. Culture actively takes advantage of mistakes and failure as a part of learning and improvement.
- *Relational belonging and inclusion.* Culture fosters strong relationships between the students and teachers. Culture and strategies actively promotes trust, empathy, collaboration and social learning across all elements of diversity including culture, race, ability, social class, sexual orientation and gender.
- *Cultural responsiveness.* Relationships, learning environments and learning experiences respect each student's personal and cultural identities. Culture actively supports all

stakeholders, especially adults, to identify, investigate and address unconscious bias and stereotypes.

How Is a Culture of Learning and Inclusivity Related to Quality?

A strong culture of learning and inclusivity is the bedrock of a competency-based system. Schools seek to create a culture in which students and adults feel valued, respected and have a trusting relationship—all essential for learning. Students and adults learn best when they feel safe and experience a strong sense of belonging. They will put forth more effort and take more risks if they feel cared for and optimistic that they can succeed.

This culture enhances the technical changes that are required to transition to a competency-based system in multiple ways. For example, it contributes to the professional culture seen in successful systems like in Finland and New Zealand where inquiry-based approaches to professional learning drive improvements in instruction and assessment. Additionally, a strong culture of learning and inclusivity challenges the assumptions and beliefs of the traditional system. By challenging notions of fixed intelligence and ranking, it helps to phase out the habits and routines of institutional inequity that may impede implementation of a high-quality competency-based system.

The culture of learning has both individual and organizational dimensions and implications. At the individual level, research demonstrates the importance of growth mindset and positive beliefs for learning and development. Students learn optimally when they believe that they can improve with effort and support, when they believe that they are capable of learning at high levels and when they believe that learning has personal value for their lives. In a culture of learning, features such as incentives, grades, assessments and feedback processes align to support this view of intelligence and learning.

Beliefs and mindsets are also important at the organizational level. Nurturing growth mindsets can speed and ease the transition to competency-based systems, as adults need to feel confident that they can become competent in the new instructional and leadership strategies. The culture of learning drives continuous improvement that is central to organizational learning and to creating a system of education that can quickly adapt, improve and innovate so that more students are achieving at the highest levels.

Those schools that are deliberate about disrupting inequity purposefully investigate individual bias and seek strategies to dismantle systemic barriers to equitable outcomes. They cultivate dialogue, engagement and ritual that honor and reflect students and their families thereby opening doors to genuine trusting relationships. Their goal is for all students and adults, especially the most marginalized, to feel safe and respected.

Policies and Practices to Look For
- Leadership monitors school culture and have strategies to address areas of improvement. There are strategies to seek and apply feedback on culture. Egs: focus groups and surveys.
- Formal structures such as professional learning communities explicitly take responsibility for culture and share strategies that reinforce the desired culture.
- Educators work with students through an asset-based lens that views language, culture and family background as strengths that can contribute to a student's learning..
- Disciplinary policy recognizes that behavior problems are opportunities to form stronger relationships with students and address underlying issues.
- Teachers work collaboratively to pursue inquiry-based professional learning.

Example of a Red Flag

Grading practices penalize students for taking risks and failing, even when these risks and failures are part of the learning process. Traditional grading systems privilege those students who have all the prerequisite knowledge and skills and penalize students who do not. The policy that students should continue to practice and revise while receiving additional instructional support is an essential

pedagogical principle aligned with the culture of learning and inclusivity. Competency-based districts that implement grading policies too soon, without attending to the culture and needed technical

infrastructure, often turn or return to elements of the traditional grading system. In many cases what is termed standards-based grading is actually standards-referenced: students are still passed on without opportunity or supports to fully master knowledge and skills.

Base School Design and Pedagogy on Learning Sciences

Description

Competency-based systems leverage instructional approaches and systems of assessments all of which are based on the learning sciences. Teachers design learning experiences, select instructional strategies and use assessments based on their knowledge of their students' cognitive, psychological and biological development. The learning sciences have implications for all aspects of school design and pedagogy, including transforming the practice of teaching to a more student-centered approach in which students are active learners.

#6 Base School Design and Pedagogy on Learning Sciences

Key Characteristics

- *Learning sciences*. Pedagogy reflects the most recent research about how people learn and develop—cognitive, psychological (motivation and engagement), and biological—ensuring learning experiences result in powerful learning outcomes for students.
- *Shared understanding*. Teachers internalize understanding of the learning sciences and implications for instruction and assessment. Students also have opportunities to understand how learning happens so that they develop metacognitive abilities and the skills to monitor their learning.
- *Development opportunities*. Educators have personalized opportunities to develop professional knowledge based on learning sciences. Professional development also reflects the learning sciences so that teachers learn in the ways they are expected to teach.
- *Design to the edges*. Instructional strategies that address the educational needs of historically underserved students are embedded into the core instructional strategies.

Cornerstones of the Learning Sciences

- *Learning is an activity that is carried out by the learner*. Students do not simply absorb information and skills. Rather, learning requires active engagement and effort. Effort is influenced by motivation. Similar to intelligence, motivation is malleable. Beliefs about intelligence shape the amount of effort students are willing to invest. Those who hold a growth mindset will put more effort toward learning than those who hold the misconception

that intelligence is a fixed trait. Providing incremental opportunities to experience growth reinforces that effort will result in success. Learners will be more motivated when they value the task and if they are confident they will be successful with supports available if needed.

- *Learning results from the interplay of cognition, emotion and motivation.* The brain does not clearly separate cognitive from emotional functioning, so optimal learning environments will engage both. Motivation is important to learning but it is also dynamic and changes in response
to a number of factors. In fact, as students learn more about their cognitive processes, they develop a greater sense of competence and thereby increase their motivation. The relationship between cognition, emotion and motivation is dynamic.

- *Learning does not occur through a fixed progression of age-related stages.* The mastery of new concepts happens in fits and starts. Learning is shaped by multiple factors, some of which are related to the neural, social and emotional development of children. Others are dependent on the types of experiences and contexts provided for the learner to build new understanding on prior knowledge. Practically speaking, this means that biological factors are only a part of the story. Frequent challenges matched by social and emotional support can strengthen cognitive and psychological development. Rich learning experiences facilitated by helpful guides along with recurring opportunities to experiment, practice and improve will help students learn, develop and achieve.

- *Intrinsic motivation leads to better long-term outcomes than extrinsic motivation.* Extrinsic or controlled motivation (systems of reward or punishment such as the traditional grading system of 0-100 points for assignments and behaviors) may be useful in the short-run but often produces the unintended consequence of disengagement and resistance. Self-determination theory explains that motivation will increase when learners experience competence (I can be successful), relatedness (I have meaning and connection) and autonomy (I have control over the process). It's important to remember that motivation is dynamic. It increases and decreases. It can be shaped by cognitive processes, and external expectations can become intrinsic motivation.

- *Effort is dependent on motivation and self-regulation.* When learners are able to self-regulate—when they can successfully manage thoughts, behaviors and emotions—they are better able to initiate and sustain focus and effort on difficult tasks. Students may be highly motivated but not have the skills necessary to manage the emotions they experience in the process of learning. Thus, students need coaching to build the social and emotional skills to manage the stress they experience from situations in or out of school, the metacognitive skills to monitor their learning and the self-regulation skills to change strategies as needed.

- *Learning is shaped by the way information is processed and transferred into long-term memory*. New information is processed in working memory before it can be transferred into long-term memory. Working memory has limitations to how much new information it can absorb, requiring students and teachers to consider the cognitive load. Strategies can be used to reduce demand on working memory and helping to transfer new information and concepts into long-term memory.

- *Learning builds on prior knowledge and context*. People learn new knowledge optimally when their prior knowledge is activated. Learners need to have structures to organize and retrieve
  information. Thus, attaching new information to what they already know in a context where that knowledge is accessible, relevant and responsive to cultural understanding can be helpful in mastering new ideas and skills.

- *Acquiring new knowledge and skills requires effective feedback*. Effective feedback focuses on the task (not the student) and on improving (rather than verifying performance). Assessing student learning, identifying misconceptions or gaps in understanding and providing feedback are critical steps in the learning process. Assessment information is as important to helping teachers to adjust their teaching strategies or improve their skills as it is for helping students adjust their learning strategies. Research on learning progressions helps teachers to understand how students are understanding concepts and processes not just whether they reached the correct answer.

- *Learning is a social process*. Learning occurs in a sociocultural context involving social interactions. Individuals need opportunities to observe and model behaviors—both from adults and peers—to develop new skills. Dialogue with others is needed to shape ways of thinking and construct knowledge. Discourse and collaborative work can strengthen learning when they allow students to assist each other and take on expert roles.

- *Learning occurs through interaction with one's environment*. The human brain, and therefore learning, develops over time through exposure to conditions, including people, experiences and environmental factors. A person's culture may also serve as "context" that influences learning. Learning occurs best in conditions that support healthy social, emotional and neurological development. Students will be more motivated in schools when they believe that they are accepted, belong and respected. Optimal learning environments attend to and seek to ameliorate status differences and social hierarchies so that students do not feel marginalized, ostracized or threatened.

Policies and Practices to Look For

- There is a clearly articulated pedagogical philosophy or set of beliefs that drive instruction.
- Professional learning gives educators the opportunity to develop the skills necessary to enact the shared pedagogical philosophy. It draws upon the learning sciences and is personalized for educators. Within professional learning communities educators engage in inquiry to understand research to better support students that are struggling.
- Instructional strategies take into consideration that students start with different sets of academic skills, social and emotional skills and life experiences.
- There are school-wide approaches for helping students develop the building blocks of learning or self-directed learning skills such as growth mindset, metacognition, self-regulation and perseverance.
- All students have opportunities to apply learning and build higher-order skills supported by performance tasks and performance-based assessment.
- Grading practices are aligned with the learning sciences.

Example of a Red Flag

Students are expected to listen and learn, with little opportunity for practice or feedback. Direct instruction and lecture has its place in the set of instructional strategies teachers use. However, if most classrooms have students sitting and listening to teachers with little opportunity for students to practice, receive feedback or actively apply their learning, there is a good cause to be concerned that the school has not fully understood or explored the implications for the learning sciences.

Quality Principle #7

Activate Student Agency and Ownership

Description

The learning sciences point out that learning is something done by students, not to or for students. Thus, competency-based schools use strategies to help students build agency: the skills and ability to direct one's course in life and become a lifelong learner. When students have agency they find purpose in learning, are motivated to put forth the effort needed to persist through challenges and are able to manage their progress in learning. Agency requires both mindsets and skills, including growth mindset, self-regulation and other social and emotional skills, metacognition and perseverance. When students take ownership of their learning, they transform the learning environment so that teachers are better able to provide tailored and targeted instruction.

Key Characteristics

- *Active learning*. Schools and pedagogy are based on the learning sciences with students actively engaged in their own learning.
- *Opportunities for agency*. Instructional strategies are designed to help students build skills and have some degree of autonomy in their learning. Teachers construct opportunity for students to make choices in their learning and co-design learning tasks. Students learn to set and reflect on a goal. They have voice and ownership in decisions about their learning and increased leadership in classrooms, school activities and school governance.
- *Building blocks for learning*. Students are supported to build developmental skills, mindsets and character traits of learning. Learning experiences provide opportunities for practice and feedback. There are additional supports and learning opportunities for students that have not yet learned or are struggling to master the building blocks for learning.
- *Timely and transparent information*. Students have access to accurate information to support informed decision-making.
- *Educator support*. Educators are supported and have opportunities to develop their own competency in coaching students on the building blocks for learning, designing learning experiences in which students have opportunity to practice and effectively assess student development with attention to cultural differences.

How Is Supporting Students in Building Skills for Agency Related to Quality?

One of the most transformative changes in personalized, competency-based education is the shift from compliance to empowerment. Whereas the traditional system expects students to be compliant, passive learners, high-quality competency-based systems engage them as productive, active learners. High-quality competency-based education systems turn to instructional strategies that help students find purpose in learning and motivate them to put forth the effort needed to learn. They are intentional in helping students build intrinsic motivation and with graduated release will provide opportunity for students to learn to make decisions about and co-design their learning.

There are at least three capacities that schools need to build to support students in becoming active learners and build the skills for lifelong learning: coaching, meaningful information and opportunities.

- *Coaching:* Although one can argue that we are all born with agency, it requires skills to be able to become strong self-advocates and lifelong learners. Building blocks for learning include growth mindset, self-regulation and metacognition.
- *Meaningful Information:* Students can only make meaningful choices about their learning when armed with adequate information about the cycle of learning, learning targets, and what proficiency looks like.
- *Opportunities:* Empowering students also means providing them with real opportunities to practice the skills necessary to be independent learners. Teachers can proactively develop these skills in students and construct learning experiences that let students practice self-regulation and develop academic behaviors. Classroom management strategies can enable students to practice decision-making at appropriate developmental levels. Teachers support students to build skills, using gradual release that increase agency, not simply handing over the reins.

As students become active learners with increasing ability to guide their learning, the roles and power dynamics in the classroom will change. With the help of classroom management strategies and routines, students can take more responsibility for their learning and free teachers to work purposefully with small groups or individuals. Thus, a virtuous cycle is created: when learning is personalized and students become active participants in their education, greater degrees of personalized learning are enabled. Teachers are better able to meet students where they are and students feel more engaged when they have more autonomy of how they learn, how they demonstrate their learning, and more opportunity to pursue tasks that are of interest to them.

Policies and Practices to Look For

- Common assessments and common outcomes enable students to have access to flexible pathways, co-design projects, and multiple ways to learn and demonstrate learning.
- School strategies to nurture student agency are intentionally monitored to ensure that all students, specifically historically underserved and marginalized students, are receiving the feedback and coaching they need to build skills.
- Students can explain what they are working on, why it is important, what they need to do to demonstrate learning, and what they can do if they are struggling.

Example of a Red Flag

Student agency is thought to be the same as choice. Too often schools interpret the concept of student agency as equivalent to choice. This misconception shows up in many ways: teachers think students have agency if they get to pick which book they read or where they sit, or think that having longer playlists equals more agency. There is nothing wrong with these practices—choice provides a limited form of autonomy for students to exert control over their learning process. Providing choice is only one technique to help students build agency, but it is not adequate on its own.

Quality Principle #12

Maximize Transparency

Description

The common learning framework of student learning objectives is transparent to all. Students know where they are on their learner continuum, their progress and growth. Transparency of the teaching and learning philosophy also facilitates student ownership and builds intrinsic motivation for students. Distributed leadership depends on access to guiding principles and data to support collaborative decision-making. As a result, everyone can be actively engaged in the process of continuous improvement. Transparency isn't only about information. It is also relational in creating open, honest and when needed dialogue that addresses problems and challenges bias. Trust builds as understanding of different perspectives deepen.

#12 Maximize Transparency

Key Characteristics

- *Common learning framework.* A common learning framework or continuum of learning has been agreed upon and shared among teachers, students and families about what knowledge and skills students are expected to learn. The framework includes learning targets along with rubrics and examples of proficient student work. In early stage competency-based schools, this tends to be similar to grade-level state standards. Districts and schools may choose to organize around competencies that describe the core sets of skills students are expected to know upon graduation that are then organized to communicate specific performance or grade levels. The most developed districts and schools use a "learner continuum" that includes multiple performance or grade levels to indicate student progression based on where they are rather than where they should be based on their age.
- *Student progress.* Information is available and accessible to students, educators and families on where students are in terms of advancing upon targeted learning objectives including grade level targets and personal growth based on a learner continuum.
- *Assessment for learning.* Students receive feedback so that they understand exactly what they need to learn and do to reach proficiency. Teachers are skilled in assessment for learning to provide effective feedback for students to address misconceptions and successfully reach proficiency.
- *Instructional and assessment level of knowledge.* Teachers are aware of and align the instruction and assessment to the appropriate depth of knowledge called for by the learning target.
- *Grading is an indicator of progress, not judgment or comparison.* Schoolwide grading policies provide feedback on how students are progressing toward mastering learning objectives with transparency about performance level of each student.
- *Student-centered.* Students and educators can monitor learning across a variety of domains and performance levels.

How Is Establishing Transparency Related to Quality?

The traditional education system is highly opaque and demonstrates significant variability in defining what it means to be proficient. Traditional mechanisms like grades and transcripts do not accurately reflect how well a student actually knows content or demonstrates skills. This inaccuracy makes it harder for students to drive their own learning and for educators to meet students where they are. Trust and confidence in the schools is shaken when students and families receive false signals and mixed messages about student progress.

Competency-based systems ensure that goals, learning targets, exemplars of proficiency and student progress are fully transparent and available to students and educators on a timely basis. They build

capacity for comparability, validity and reliability in assessments and grading practices to ensure that data is meaningful, and that students are truly mastering content and skills.

Transparency plays multiple roles in creating high-quality and more equitable systems. First and foremost, it eliminates the practice of signaling that a student is doing fine with an A, B, or C grade even though they may be performing at two, three or more years below grade level. When schools fail to help students master content and skill, students move forward with holes in their learning that limit and impair future learning. These gaps compound over time, becoming harder and harder to mitigate as students advance and making it increasingly challenging for students to progress toward college and career readiness. When learning is transparent, however, educators and students know where gaps are and can address them proactively with timely and differentiated supports. Students advance with confidence that they have skills to tackle more advanced challenges. Furthermore, when transparency leads to honest conversations between teachers, students and families about how to help students become successful in their learning, trust blossoms. Trust rooted in relationships fosters support for students to be persistent in spite of challenges. Awareness, trust, effort and persistence are catalytic: they empower students to take ownership and continually move toward mastery.

Transparency is particularly essential in competency-based systems that include personalized pathways. Transparency ensures educators can monitor whether students on different pathways are progressing toward common rigorous outcomes. Additionally, transparency helps students and educators integrate learning that occurs across a variety of learning environments: in the classroom, in the community and online. This can be an important part of helping students to make connections and co-design learning experiences that are relevant to their lives. There are several aspects of transparency that are critically important for operationalizing competency-based education: common learning framework, student agency, grades and information management/reporting.

Policies and Practices to Look For

- The learning objectives such as competencies and standards are explicit and transparent. Examples of student work at proficiency for each performance level are easily accessible. Learner continua are student-centered to reflect where students are in their learning journey.
- Assessment criteria is transparent so that students can bring evidence of learning from other classes and from activities beyond the walls of the classroom.
- Districts are open and honest in all communication. Clarity of intentions, expectations, learning targets and feedback ensures everyone has the information to advance their goals.
- Students and parents understand that there is a difference between age-based grade level and personalized performance level and where students are in each academic domain.
- Grading practices and policies are clear, fair and communicate student progress in their learning.

- Students understand where they are in their personalized pathway and the cycle of learning. When asked, students can tell you what they are working on, how it relates to competencies they will need in their future and how they are going to demonstrate their learning.
- Students are using the learning targets to co-design projects with community partners where they will be able to apply their knowledge and skills. Students can demonstrate their learning as it relates to their passions, interests and goals by partnering with local and global community members to create service learning or entrepreneurial experiences that contribute toward graduation requirements.
- There is a high-functioning system in place to track students' progress, to capture and store the evidence that demonstrates their progress and communicate their progress. Students use the reporting systems to identify goals, store their body of evidence and reflect upon their lifelong learning skills.

Example of a Red Flag

The common learning framework or continuum is only available for age-based grade level. In many schools, the focus is still on covering grade-level standards. It is expected that all students start at the same place in the curriculum at the beginning of the semester and expected to finish by the end. Grade books only include grade-level learning targets. The problem is that many students need to repair gaps that require them to focus on targets at lower levels. Or they may have already mastered the grade-level standards and are ready to work at the next level. Neither students or teachers are recognized for repairing gaps or learning beyond grade level.