**Teachers Need to Build Their Capacity to Nurture the Learning of Each Student**

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**Teachers Need to Build Their Capacity to Nurture the Learning of Each Student**

Teachers have an opportunity to nurture the learning for each student at each grade level by developing instructional practices and system structures that support and promote a personalized, competency-based education (PCBE) environment. The learning gaps for those students who are non-white, from low socioeconomic backgrounds, learning disabled, or have limited English language have persisted for more than 30 years at the state and national level (NCES, 2019). Personalized, competency-based learning implements successful principles that are effectively closing these gaps while nurturing learning for all. What is exciting is that there is now more research and first-had experiences being reported by teachers and administrators to validate PCBE as a transformative learning environment which has the potential to significantly and absolutely nurture the learning of each student at every grade level.

Rather than maintaining a traditional education model where it is accepted, even expected, that some students will fail, and all students will be sorted and ranked, districts adopting a PCBE model are implementing five principles that are making a difference and nurturing all students’ learning. The principles include mastery learning, deeper learning, authentic assessment, personalized supports, and anytime/anywhere learning. Teachers and administrators across our nation continue to build their capacity in each of these five areas as part of their own professional learning while implementing these principles to create system change that promotes nurture the learning of each teacher and student.

**Nurturing Learning through Mastery Learning**

Mastery learning is present when students only advance when they demonstrate mastery of the standards or competencies. Mastery and proficiency are both understood to be synonymous. Performance-based assessments provide opportunities for students to demonstrate proficiency in concepts, skills, and dispositions (Ernst et al., 2017). Mastery is required for students to advance to the next higher level of work rather than a less meaningful unit or chapter test and regardless of seat time (Casey, 2018; Friend et al., 2017).

Learning and reaching proficiency may take each student a different amount of time, depending on their ability, interest, and prior knowledge. Students and teachers are partners in their learning. Students work with teachers to determine what learning targets need to be met and how they will demonstrate mastery upon completion of an assignment, project, work-based, or community-based learning opportunity (Haynes et al., 2016; Pane, Steiner, Baird, & Hamilton, 2015). Teachers encourage students to use higher order thinking skills when working on mastering multiple standards across content areas (Bramante & Colby, 2012). Mastery learning results in students improving in both academic knowledge and critical skill proficiencies, typically not evident in the traditional industry-model education system (Washor & Mojkowski, 2013).

**Capacity Requirements for Professionals:**

* Standards-based learning and grading based on priority standards and critical knowledge, skills, and dispositions
* Proficiency scales and performance rubrics so there are clear learning targets and both the teacher and student know what mastery looks like and what the expectations of learning are
* Learning management system that allows for constant formative assessment system that allows for timely and relevant feedback that specifically allows teachers, students, and parents to know exactly where the student is in their learning to mastery

**Reported Outcomes:**

* Students demonstrated an increase in the level of ownership of their learning (Sturgis & Casey, 2018)
* Students experience a higher level of engagement as a result of learning that directly connects to areas of interests, abilities, and passions
* Students can focus, with the support of teachers, on those concepts and skills where they need more work rather than spending time on things they have already mastered
* Students partner with teachers in tracking their learning targets and setting goals for performance (Friend et al., 2017)

**Nurture Learning through Deeper Learning**

Deeper learning is evident when students are able to demonstrate competencies such as complex communication, adaptability and flexibility, and other skills that require the transfer of knowledge across content areas (Pane et al., 2015). Teachers include skills and dispositions that are enduring, transferrable, and prepare students for the ever-changing, global workforce in addition to their academic knowledge and skills.

Deeper learning indicates students are able to demonstrate the use of their knowledge and skills into cross-curricular projects centered on an area of high interest to the student. Student work is significant and meaningful to the students which nurtures their curiosity, creativity, and replacing memorization of facts, worksheets, and chapter tests. Students are encouraged and supported by their teachers to “create their learning experiences, connecting their own needs and interests to the competencies so they are college and career ready” (Sigrist & Stewart, 2017). It is in this principle that learning opportunities include knowledge, skills, and dispositions that are transferrable and relevant.

**Capacity Requirements for Professionals:**

* Clearly identified learning targets that include universal constructs and dispositions as well as specific content knowledge and skills
* Integrated learning opportunities that are multi-disciplinary and conceptual in nature that allow for transfer of knowledge and skills across the content areas
* Increased use and availability of technology allows students to access their learning in a variety of modes and models.

**Reported Outcomes:**

* An increase in the number of students graduating from both the secondary and post-secondary educational systems, who are career-ready, and able to be competitive in the global market (Boyer & Crippen, 2014; Brodersen & Randel, 2017)
* An increase in student achievement, an increase in academic rigor, and teachers found that students were demonstrating more academic success overall (Ernst et al., 2017; Sullivan et al., 2015)

**Nurture Learning through Authentic Assessment**

Assessment for and of learning is given to students while providing personalized support based on individual needs (Sigrist & Stewart, 2017). Authentic assessment is a meaningful and positive part of nurturing the learning experience of each student (Beres, Magyar, & Turcsanyi-Szabom, 2012; Marcus, 2017). Rather than relying on a fixed, corporate test to assess students and then continue with the next content regardless of the results, whether students are ready or not, teachers use authentic assessments when a student feels they are ready and then, the teacher uses the information to guide their instruction, help identify needs and strengths of each student’s competence, and design learning paths for helping the student move forward (Meyer, Rose, & Gordon, 2014).

Formative and summative assessments are a critical component of a PCBE system. Authentic assessment indicates a demonstration of knowledge and skills with real-world application. Assessments are linked to rubrics or proficiency scales, which clearly articulate the specific evidence needed for the student to show mastery (Kane, McCaffrey, Miller, & Staiger, 2013; Marzano, 2010). Rather than an end-of-chapter or unit test, this type of assessment is ongoing, providing specific feedback that is meaningful and timely to the student (Guskey & Erkens, 2009; Lash & Belfiore, 2017). Teachers can guide and support students throughout their learning process. Assessment changes from one-time, high stakes testing to both a formative and summative system providing accurate, detailed feedback promptly that is meaningful to the students’ learning targets (Brookhart, 2009, 2017; Marzano, 2010).

**Capacity Requirements for Professionals:**

* Learning progressions and learning targets are clearly defined for students, parents, and teachers (Stack & Vander Els, 2018)
* Measurement of achievement is based on hard evidence, often demonstrated through a performance-based, summative assessment using rubrics and proficiency scales
* Proficient levels using higher-order thinking skills are supported by high quality instruction

**Reported Outcomes:**

* Teachers, students, and parents/guardians have the same information regarding where the student is, what they need to be working on, and where they are excelling or in need of additional support (Bray & McClaskey, 2017; Patrick et al., 2018)
* Formative feedback is provided to the students throughout their learning process, as well a focus on the specific learning targets being assessed (Ernst et al., 2017)
* Implementing performance-based assessments can create a more rigorous application of academic and critical skills needed to be competitive in a global workforce
* Many times, the level of student work is increased by incorporating tasks that have value beyond school (Newman, Carmichael, & King, 2016)

**Nurture Learning through Personalized Support**

There is nothing that can nurture the learning of each **s**tudent than being able to receive personalized support based on their learning needs when they need it (Patrick et al., 2018; Sigrist & Stewart, 2017). The teacher’s role becomes a combination of direct instruction, workshop facilitation, coaching, and mentoring with different learning paths for each student.

Personalized support ensures that lecture-only and sit-and-get instruction are no longer the primary method for delivering content to students. Learning outcomes for all students are designed to meet each student where they are with clear expectations and learning progressions students would use to reach proficiency (Tomlinson, 2014; Toshalis & Nakkula, 2012). Textbooks are replaced with clear learning targets as the primary instructional guide. Curriculum becomes fluid, moving from concept to concept across content areas and grade levels to make the learning for all students personalized, differentiated, and individualized (Bramante & Colby, 2012; Friend et al., 2017; Sturgis & Casey, 2018). This principle guides instruction to explicitly deliver content at the student’s level and pace.

**Capacity Requirements for Professionals:**

* A student may have some choice connected to areas of interest to engage students in their learning at a higher level (Bray & McClaskey, 2017; Deed et al., 2015)
* Adults in the schools share and support students in whatever way is needed to move them toward mastery
* Teachers, special education teachers, paraprofessionals, and other staff work together to meet each student’s needs
* Students are allowed to access learning in a variety of formats such as flipped learning, blended learning, centers, workshops, small or large group, one-on-one instruction, or project-based learning based on their preferences

**Reported Outcomes:**

* Teachers and students work together to meet their learning targets successfully (Meyer, Rose, & Gordon, 2014)
* More students are staying in school and finding success as a result of higher levels of engagement and student agency (Sullivan et al., 2015)
* Increased levels of collaboration between students and teachers, teachers and teachers, and students and students
* All students have their individual needs met rather than just those few on IEPs or in TAG by providing flexible learning paths, personalized pacing and student voice and choice
* Students receive direct instruction but then move through content and reach out to teachers as needed for targeted instruction and support as part of the learning process

**Nurture Learning through Anytime, Anywhere Learning**

Never before has the opportunity for anytime, anywhere learning been more needed than in this past year. Hopefully, this will be one dynamic change to the traditional education system that would only recognize or give credit for “learning” in the classroom. This principle validates learning regardless of when or where learning takes place. This allows the curriculum and learning experiences to extend beyond the school or classroom walls and integrates academic content to skills and dispositions needed for success beyond school. (Sigrist & Stewart, 2017; Washor & Mojkowski, 2013).

The learning environments are no longer limited to a classroom or lecture hall. The student progresses through academic content, along with requirements to master transferable soft skills, such as complex communication, problem-solving, flexibility, and accountability in a flexible learning environment (Bramante & Colby, 2012; Sturgis & Casey, 2018). Student progress is demonstrated inside and outside the walls of the educational institution, many times through performance-based tasks and project-based learning opportunities. This design structure is key to providing opportunities where academic content is applied, and professionals in business and industry genuinely assess critical skills in an authentic, relevant, real-world experience. Learning can look different for each student and, so it should if the genuine commitment of our school is that we are creating life-long learners, competent to scale the constantly changing global economic, social, and political spheres of our world.

**Capacity Requirements for Professionals:**

* Provide students with authentic intellectual work in real-world, relevant settings (Newman et al, 2016)
* Develop structures that recognize and award credit for learning that occurs in a physical environment and culture that is significantly different from the traditional classroom
* Increased use and availability of technology allows students to access their learning in a variety of modes and models.
* Integration of standards and skills across content areas so students can meet multiple standards in a number of different content areas in one project or assignment rather than duplicating work to demonstrate the same level of mastery

**Reported Outcomes:**

* Student engagement and ownership is significantly increased
* Learning is taking place outside the classroom; even those struggling students were found to be spending time on nights and weekends working to reach mastery to be able to advance to the next learning target
* Connecting students to business, industry, and community partners through work-based learning or internships
* Creating real-world learning experiences students need to see the relevance of the content knowledge, skills, and dispositions they are striving to master
* Example - credit for presenting a 4-H project at the county fair that takes place in the summer could be an option if standards and competencies are explicitly identified, and the teacher is available to assess the demonstration of learning (Bramante & Colby, 2012)

**PCBE’s Impact on the Learning Environment**

An extensive study conducted in 2020 provides a glimpse into these transformed educational systems that provide learning environments with students learning and succeeding as had not been experienced previously (Yanacheak, 2020). The impact on staff and students described by 17 administrators and teachers from seven districts in three states indicated that these five principles supported changing clarifying their whole educational systems directly impacting grading, time, learning, and support for students universally. Establishing clear learning targets and developing proficiency scales required increased collaboration between teachers and teachers as well as teachers and students. Teachers and students became very clear about the priority standards, learning targets, and success criteria across all content areas. This clarity and the establishment of proficiency scores made it possible for teachers to support all students throughout their learning process. Students were able to know what the expectations for learning were prior to beginning work on assignments or projects. They would meet with teachers to have conversations about these learning targets and set goals to achieve mastery to be able to advance.

PCBE affected the relationship between the teachers and students in their rooms and buildings. The teachers knew their students better. They knew their learning needs, how they learned, and specifically, where each student was in their learning progression. This dynamic created a nurturing learning environment which had not been experienced before by either the teachers or the students. This is just one of the many examples found in the data which demonstrates the impact PCBE had on the learning of each student. It was found to support an increase in student engagement, motivation, and an ownership of their learning. For both staff and students, learning had become the focus rather than grades, meeting seat time, or even the scores on state-level assessments. Students and teachers were reported to have a greater sense of success and confidence as a result of seeing the academic growth being achieved while meeting learning proficiencies that led to advancement. For some students, this was their first experience in some time where they were provided with the support and the expectation that they would successfully master the content and not settle for a C or D grade to pass. Academic growth of a year or more was reported in several content areas. As teachers and students began to see these successes, the level of encouragement, intrinsic reward, and commitment to the PCBE model increased.

Administrators and teachers discussed how some of the most exciting outcomes their schools experienced were that students who had significant learning gaps, who were struggling learners, or other special population students (SES, ethnically diverse, ELL), began to experience success. Teachers’ roles changed from instructing at the front of the classroom to being a facilitator, coach, and collaborator. It was the first time that many of the students began to experience positive learning experiences, where they began to believe that they could learn. Teachers acknowledged that, when making the shift from always delivering the same lesson and content to the whole class at the same time regardless of their students’ readiness to one that was personalized and designed to meet the needs of individual learners, they were encouraged, excited, and empowered by the change they saw in their students.

**References:**

Bramante, F. & Colby, R. (2012). *Off the clock: Moving education from time to competency.* Thousand Oaks, CA:

Corwin/SAGE Publications Inc.

Bray, B. & McClaskey, K. (2017). *How to personalize learning: A practical guide for getting started and going*

*deeper.* Thousand Oaks, CA: SAGE Publications Ltd.

Brodersen, R.M. & Randel, B. (2017). *Measuring student progress and teachers' assessment of student knowledge*

*in a competency-based education system* (REL 2017-238). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Central. Retrieved from http://ies.ed.gov/ncee/edlabs

Beres, I., Magyar, T., & Turcsanyi-Szabo, M. (2012). Towards a personalized, learning style based collaborative

blended learning model with individual assessment. Informatics in Education, 11(1). Retrieved from https://www.mii.lt/informatics\_in\_education/

Boyer, W., & Crippen, C. L. (2014). Learning and teaching in the 21st century: An education plan for the new millennium developed in British Columbia, Canada. Childhood Education, 90(5), 343-353. doi: 10.1080/00094056.2014.952218

Brookhart, S. M. (2009). *Exploring formative assessment*. Alexandria, VA: ASCD.

Brookhart, S. M. (2017). *How to give effective feedback to your students*. Alexandria, VA: ASCD.

Casey, K. (2018). *Moving toward mastery: Growing, developing and sustaining educators for competency-based*

*education*. Vienna,VA: iNACOL. Retrieved from www.iNACOL.org

Deed, C., Cox, P., Dorman, J., Edwards, D., Farrelly, C., Keeffe, M, Lovejoy, V.,. . . . Yager, Z. (2015).

Personalized learning in the open classroom: The mutuality of teacher and student agency. *International Journal of Pedagogies & Learning, 9*(1), 66-75. doi:10.1080/18334105.2014.11082020

Ernst, J. V., Glennie, E., & Li, S. (2017). Performance-based task assessment of higher-order proficiencies in

redesigned STEM high schools of higher-order proficiencies in redesigned STEM high schools.*Contemporary Issues in Education Research (Online), 10*(1), 13-32. Retrieved from <http://dx.doi.org/10.19030/cier.v10i1.9877>

Friend, B., Patrick, S., Schneider, C., & Vander Ark, T. (2017). *What’s possible with personalized learning?*

Vienna, VA: International Association for K-12 Online Learning (iNACOL).

Guskey, T. R., & Erkens, C. (2009). *The teacher as assessment leader*. Bloomington, IN: Solution Tree Press.

Retrieved from http://institute4pl.org/index.php/our-model/

Haynes, E., Zeiser, K., Surr, W. Hauser, A., Clymer, L., Walston, J.,...Yang, R. (2016). *Looking under the hood of*

*competency-based education: The relationship between competency-based education practices and students' learning skills, behaviors, and dispositions.* Washington, DC: American Institute for Research (AIR). Retrieved from www.air.org

Kane, T.J. & Staiger, D.O. (2010). *Gathering feedback for teaching: Combining high-quality observations with*

*student surveys and achievement gains*. Seattle, WA: Bill & Melinda Gates Foundation.

Lash, D. & Belfiore, G. (2017). *Visual summary of the MyWays student success series.* Retrieved from

myways.nextgenlearning.org/report

Marzano, R. J. (2010). *Formative assessment & standards-based grading*. Bloomington, IN: Marzano Research

Laboratory.

Meyer, A., Rose, D.H., & Gordon, D. (2014). *Universal design for learning: Theory and practice.* Wakefield, MA:

CAST, Inc.

Newman, F., Carmichael, D.L., & King, B. (2016). *Authentic intellectual work: Improving teaching for rigorous*

*learning.* Thousand Oaks, CA: Corwin.

Pane, J.F., Steiner, E.D., Baird, M.D., & Hamilton, L.S. (2015). *Continued progress: Promising evidence on*

*personalized learning.* Santa Monica, CA: RAND Corporation. Retrieved from <https://www.rand.org>

Patrick, S., Worthen, M., Frost, D., & Truong, N. (2018). *Current to Future State: Issues and Action Steps for State*

*Policy to Support Personalized, Competency-Based Learning*. Vienna, VA: iNACOL.

Schwahn, C. & McGarvey, B. (2012). *Inevitable: Mass customized learning, learning in the age of empowerment.*

Sigrist, J. & Stewart, A. (2017). *The competency-based education innovation configuration map*. The Center:

Collaboratively Building Iowa’s Learner-Centered Future.

Stack, B.M. & Vander Els, J.G. (2018). *Breaking with tradition: The shift to competency-based learning in plcs at*

*work*. Bloomington, IN: Solution Tree Press.

Sturgis, C. & Casey, K. (2018). *Quality principles for competency-based education*. Vienna, VA:iNACOL.

Sullivan, S. C., & Downey, J. A. (2015). Shifting educational paradigms: From traditional to competency-based

education for diverse learners.*American Secondary Education, 43*(3), 4-19.

Tomlinson, C.A. (2014). *The differentiated classroom: Responding to the needs of all learners.* (2nd Ed.).

Alexandria, VA: Association for Supervision and Curriculum Development

Toshalis, E. & Nakkula, M. (2012). Motivation, engagement, and student voice. The Education Disgest, 78(1), 29.

Retrieved from www.eddigest.com

U.S. Department of Education, National Center for Education Statistics. (2019, May). The condition of education.

Retrieved from https://nces.ed.gov/

Washor, E. & Mojkowski, C. (2013). *Leaving to learn: How out-of-school learning increases student engagement*

*and reduces dropout rates.* Portsmouth, NH: Heinemann

Yanacheak, M. (2020). *A phenomenological study of five principles supporting personalized, competency-based*

*education* (Doctoral dissertation). (Order No. 28093029). ProQuest LLC: Ann Arbor, MI