# Exploring the Uses of Performance-Based Assessments to Assess Postsecondary and Workforce Readiness

By Elena Diaz-Bilello*, Jared Anthony** and Angela Landrum**
*Center for Assessment, Design, Research and Evaluation (CADRE), University of Colorado Boulder
**Colorado Department of Education

## SUMMARY

Beginning with the Class of 2021, and in addition to local graduation requirements, Colorado students can graduate from high school based on the Graduation Guidelines menu of options.  Each of the different options on the menu are intended to provide more flexible ways for students to demonstrate mastery of the Colorado Academic Standards (CAS) and Postsecondary and Workforce Readiness (PWR) Essential Skills. Included on this menu is the option for Collaboratively Developed Standards-Based Performance Assessments.  This menu option presents a unique opportunity for educators and students to utilize performance-based assessments that when designed well, can help advance a student- and equity-centered vision of learning and assessment by allowing students with diverse needs and backgrounds to deepen their knowledge of content through relevant projects and tasks, while fostering important skills that transfer across post-secondary and workforce settings.

**This document summarizes a set of papers produced by the Center for Assessment, Design, Research and Evaluation (CADRE) at the University of Colorado  Boulder's School of Education to study the implementation of Performance-based Assessments (PBAs) used at two high schools in Colorado to assess the CAS and PWR.**

The objective of this multi-site case study work was to learn from schools that have used PBAs for several years to establish relevant learning experiences for students and to evaluate student PWR knowledge and skills.  The papers focused on the implementation of this work at each school, compared the instructional practices of four teachers (two at each school) focused on this work, and reported on the experiences of their students.  The implications from this study will be of interest to schools and districts who have implemented or seek to implement a similar approach for assessing the CAS and PWR Essential Skills to promote more relevant and equitable learning opportunities for students.

School of Education
UNIVERSITY OF COLORADO BOULDER

## ABOUT THE PBA PILOT INITIATIVE

This PBA initiative was initially launched by the Colorado Department of Education (CDE) to promote authentic teaching and learning experiences, and to equip students with critical content knowledge and skills for achieving PWR through a complex product or presentation.  To begin the work of building capacity across interested schools to use PBAs for PWR evaluation purposes, CDE sponsored state-wide professional learning communities (PLCs) for educators to help define which key essential skills are most appropriate to be addressed in the classroom by these tasks and to build out high-quality performance assessment activities.  The first PBA pilot was completed in the Spring of 2019 with participation from five schools across four districts.   Educators participating in the year 1 pilot built the framework of identifying key essential skills that would need to be embedded in the PBAs developed for assessing PWR.  For the 2020-21 school year, CDE contracted with 2Revolutions to provide PBA training in professional learning communities with a new cohort of teachers.  The focus of these trainings centered on developing and trying out high-quality tasks that combined essential skills and the CAS. The PLC also served as a way for educators to establish common understandings of the essential skills to be assessed in the classroom and Colorado's design elements.  Additionally, the participants this year had the opportunity to engage in structured protocol sessions aimed at providing feedback around each of the design elements and the extent to which the tasks might elicit evidence of PWR skills and the CAS. The hope is that based on the collaborative feedback sessions, participants will improve the design of their PBAs prior to using them for their classes during the 2021-22 school year.  More details about this pilot work can be found on CDE's website.

Although details around using collaboratively-developed standards-based performance assessments for making graduation determinations are still being defined, the department has encouraged interested schools and districts to experiment with using PBAs for making locally determined decisions around PWR attainment.  The case study schools studied by CADRE provided an opportunity to learn from the experiences taking place at two high schools piloting PBAs for assessing PWR.  We first highlight key findings from the implementation work before highlighting key findings from how this work impacted the teaching and learning experiences at these two schools.

# WHAT CAN WE LEARN FROM THE PBA IMPLEMENTATION EXPERIENCES AT THE CASE STUDY SITES?

Based on interviews with school leaders and teachers, we learned that this initiative appeared to achieve more support across the educational system than within each school. The "system" is defined here as the supportive interactions taking place between the state, district, and schools to advance a similar vision for undertaking this PBA work in high schools.

## Supportive ecosystems are needed for successful implementation.

For the most part, the multi-site case study found that actors across state, district and school leadership levels shared a similar vision for this work. School leaders noted the importance of upholding a vision that considers more authentic applications for assessing PWR and the power of using PBAs to engage students in acquiring knowledge and skills through relevant project work. According to school leaders, they could not sustain this work if it were not for the supportive policy environment and resources shared by the district and the state. At one school, the support found across different levels of the system extended to the larger ecosystem of parents and community members that actively participate and engage with students during their presentations of learning. However, at the other case study site, the work of engaging both parents and community to understand and support this initiative presents an opportunity for future growth.

## Successful implementation is dependent on a shared vision.

Although school leaders and teachers acknowledge that a shared vision for this work needs to be strengthened across teachers, one school established a stronger shared learning vision for this work or horizontal coherence, than the other site. At that school, teacher buy-in for the PBA work is growing through collaborations mediated by professional learning community meetings established to support this work for interested teachers. At the other school, teachers do not collaborate on this initiative and tend to work in isolation to design the projects and PBAs supporting this initiative. The lack of collaborative structures set at one site to engage teachers in this work makes it difficult to ensure that all teachers share the same expectations and standards for developing rigorous and meaningful tasks for their students.

# HOW HAS THIS WORK IMPACTED TEACHING AND LEARNING?

Based on the data gathered from classroom observations, conducting think-alouds with teachers to collect their insights and thought-processes on evaluating student work, and from gathering student perspectives in focus groups, we learned that when PBAs are designed and implemented well by teachers, this initiative holds great promise for maintaining the engagement and learning of students – even during an ongoing health crisis that impacted the lives of teachers and students involved in this study. However, we also learned that when the PBAs and accompanying lessons fall short of meeting high-quality expectations and are not supported by strong formative assessment practices, well-intentioned efforts at schools to engage in equity-centered work can backfire.

## PBAs can serve their promise of meeting equity-centered goals.

At one school, data points from different sources converged to highlight the promise of teachers meeting equity-centered goals.  The two teachers at this school designed rigorous PBAs that provided students with structured and intentional choice around topics they wanted to explore and through using different media (e.g., formal research paper and podcasts) to communicate and express ideas.  These teachers skillfully used formative assessment practices to engage students in extended discourse and applied questioning techniques that elicited student thinking and reasoning. As a result, these teachers could easily pinpoint the content knowledge and skills acquired by their students as well as highlight the instructional steps taken to continuously engage their students.  Most importantly, their students valued the work accomplished with the PBAs and contrasted the engaging nature of the PBA work against the disheartening experiences found in their traditional classrooms.  For these students, the PBA work in large part sparked "excitement" in learning during a health pandemic that tended to demotivate them in other traditional classes.

## However, using authentic tools does not always make for an equitable learning experience.

Using authentic curriculum-embedded assessments cannot compensate for weak formative assessment practices.  In the case of the second case study school, we observed two teachers who struggled to use consistent formative assessment practices in their classrooms, and this impacted the learning experiences of their students.  For one teacher, questioning techniques used with students often focused on looking for correct responses, and very little discussion took place in the classroom to surface student thinking or to engage students in productive struggles with content.  For the other teacher, lesson objectives and goals were unclear and rubric criteria used did not align with expectations either from the CAS or the PWR Essential Skills defined by the state.   Voices gathered from students in these classrooms centered on feelings of disappointment and frustration due to receiving either inadequate guidance or support for their learning when engaging with this type of work.

# CONCLUSION AND IMPLICATIONS

This multi-site case study found that consistent with the literature on using PBAs, when these tasks are designed and implemented well, PBAs that are aligned with the CAS and support both curricular and instructional objectives for PWR can facilitate a school and district's efforts to provide equity-centered teaching and learning experiences.  The work of deepening students' knowledge and skills via PBA tasks while simultaneously activating student personal connections to the topics and activities explored is what gives rise to equity-centered teaching and learning experiences.  That is, students can envision themselves operating under the authentic applications and scenarios elicited by the activities embedded in the PBAs.  However, as seen in one case study site, when PBAs are not designed well or are not effectively used by teachers, the assessment and learning experiences can potentially exacerbate existing inequalities for students.  That is, the learning experiences fall short of cultivating important knowledge and skills for students to be successful in postsecondary and workforce settings.  The following considerations can help address some of the challenges observed at one school site:

## Ensure the implementation of this initiative through professional learning communities.

A key learning from one school, is that this complex work cannot be done in isolation and requires collaboration across teachers.  The two teachers struggling with the PBAs at one of the sites would benefit from having the opportunity to review and collaborate on the design of tasks and lesson plans used to support this work.  The finding that teachers at one site are designing and implementing the PBAs in isolation also goes against a key design principle of the initiative, highlighted in the name of the graduation option, that assessments be "collaboratively-developed."

## Build formative assessment capacity to support this work.

A common approach taken by states, districts and schools is to implement assessment literacy initiatives to strengthen teacher understanding and uses of classroom assessments.  Often, these initiatives tend to focus on helping teachers to interpret assessment data and to understand measurement principles.  However, within the context of classroom assessment, there is a greater need within the implementation of PBAs for teachers to focus on strengthening disciplinary understandings and formative assessment practices. Doing so will allow teachers to gain facility with skills that will enable them to provide and apply consistent feedback to students, and design tasks and activities connected to key disciplinary objectives that are connected to state standards. PBA activities supplemented by formative practices would also likely lead to teachers designing stronger classroom routines and structures for students to engage in collaborative learning and to self-assess and monitor their own learning.

# NEXT STEPS TO BE CONSIDERED BY CDE FOR THE PBA INITIATIVE

## Calibrating high-quality instructional practices and evidence of student learning.

As schools and districts begin to explore the use of PBAs for graduation purposes, stakeholders both inside and outside of the classroom will need to have confidence that evidence of learning being produced by students is of high quality. Meaning, that student work reflects sufficient evidence of both the CAS and PWR skills that have been gained through rigorous learning environments. To that end, there will also be a need for educators to continually refine their shared understanding of how to create high-quality PBA tasks and calibrate on rubrics that are used during collaborative scoring sessions.

Referenced earlier, one of the key aspects of this work is its collaborative nature. Especially collaborative scoring sessions and the process involved. This process involves teachers who each score a piece of student work independently, come together to discuss and provide justification for the score, and eventually arrive at a consensus based on pre-determined rubrics (Darling-Hammond & Falk, 2013. In addition to the collaborative nature of this process, the strength of high-quality performance assessment lies in the use of standards-based calibrated rubrics to resolve differences of perspectives and opinions during the scoring process.

Over the next year, CDE in partnership with MZD and 2Revolutions will be working with educators who are participating in the current state-level PLC to introduce a digital platform that will allow teachers to collaboratively score student work. In doing so, CDE hopes this platform can ease the burden of paper-based collaborative scoring, expedite the time needed to do so and provide opportunities for educators around the state to calibrate on rubrics and score student work together.

## Integrating PBAs within a School or District's Assessment System.

A primary goal for this initiative is to encourage schools and districts to integrate PBAs within the array of classroom assessments used to evaluate student learning. An important hallmark of authentic PBAs is their ability to provide rich problem contexts or realistic scenarios requiring extended reasoning and judgment from students (Baker et al., 1993. Although administering PBAs may not be as convenient or efficient as other types of assessments commonly used by school districts (e.g., vendor developed interim assessments, they can provide educators with a more dynamic picture of student learning, instruction, and achievement that is more responsive to local context, while meeting the rigorous demands of PWR expectations and the CAS.