



Curriculum-Embedded Performance Assessments (CEPAs): Policy considerations for meaningful accountability

By Jane Best and Emily Winslow

Policymakers often rely on data from educational assessments to deliver a snapshot of how teachers and schools are performing. These assessments then serve as a means of holding teachers, schools, and districts accountable. Many contend this is a limited use of the potential for assessments to promote deeper learning in K–12 environments. Research done in English language arts (ELA), math, science, and social studies subject matter has suggested Curriculum-Embedded Performance Assessments (CEPAs) present interesting possibilities. CEPAs are instructional units that have been designed to promote subject matter learning and acquisition of skill sets, while simultaneously providing data for assessment and accountability (Measured Progress, 2014). The ultimate goal of CEPAs is to maintain consistency between what is taught, assessed, and how teachers are prepared.

This policy brief is an accompaniment to “Re-Balancing Assessment: Placing Formative and Performance Assessment at the Heart of Learning and Accountability,” a position paper published in 2015 by McREL International and Measured Progress. The brief presents an overview of CEPAs, gives examples of successful CEPA application in K–12 education at the classroom, school, district, and state levels, and suggests ways that CEPAs can improve policy-driven outcomes.

Understanding CEPAs

The National Research Council advocates for increased emphasis on deeper learning in K–12 education through blending the development and application of transferable knowledge and skills (National Research Council, 2012). CEPAs align with this objective by combining elements of formative and performance assessments while promoting deeper learning outcomes. CEPAs can range from single-classroom exercises that assess specific academic standards to immersive, long-term projects that are instituted school-wide (Measured Progress, 2014). This type of assessment allows for rich learning possibilities as well as for formative and summative evidence collection that gauges the efficacy of deeper learning at various grade levels (Hofman, Goodwin, & Kahl, 2015). CEPAs are generally designed, implemented, and scored at the local level, and each performance assessment is typically composed of a task, a rubric, and administration guidelines (Darling-Hammond & Wood, 2008).

CEPAs have the potential to:

- Create greater professional collaboration among educators and students and a more engaging school environment
- Drive better classroom practice through personalized learning, timely feedback, and real-world application of foundational knowledge
- Generate high-quality measures of student learning and obtain data regarding instructional practice
- Bolster state-level accountability systems that ensure measurement of deeper learning and acquisition of skills students need for college, career, and real-world success (Hofman et al., 2015)

Policy Considerations

Research suggests CEPAs are tools that offer promising solutions for accountability problems at state and local levels. Education policymakers may wish to consider policies that recommend the use of CEPAs to promote deeper learning, improve teaching quality, create robust student performance data, and foster collaboration and capacity building in K–12 environments (see Figure 1 on p. 2).

Improve Teaching and Learning

The application of CEPAs present better teaching and deeper learning opportunities at all grade levels and in diverse subjects across the K–12 school system (Massachusetts Department of Elementary and Secondary Education, 2013). By using CEPAs, teachers can encourage ongoing learning, monitor student progress continually, make timely adjustments to curriculum and instruction, and gather concrete information for beneficial feedback on student learning and teacher practice.

CEPAs can improve teaching and learning practices by:

- Showing multiple measures of student proficiency across various subject areas based on a combination of evidence, teacher observations, and self/peer evaluations (Lai, 2012)
- Allowing teachers to modify curriculum and instruction to provide greater assistance or create more challenging tasks for students (Lai, 2012)
- Emphasizing content embedded in current curriculum and skills that are practiced on a frequent basis in classrooms (Datnow & Hubbard, 2015)
- Providing actionable information to enrich teaching and learning (Heritage, 2007)
- Allowing for collaboratively developed assessments that give teachers multiple opportunities to engage and assess students in meaningful real world applications (Hofman et al., 2015)

Create Robust Student Performance Data

Summative, multiple choice, standardized testing provides useful information for accountability purposes. However, these tests were not designed to capture or measure deeper learning and higher-level skill data that can be valuable for both teachers in the classroom and policymakers at different levels. CEPAs were designed to incorporate multiple performance measures, including low- and high-stakes assessments, for evidence collection (Conley, 2014).

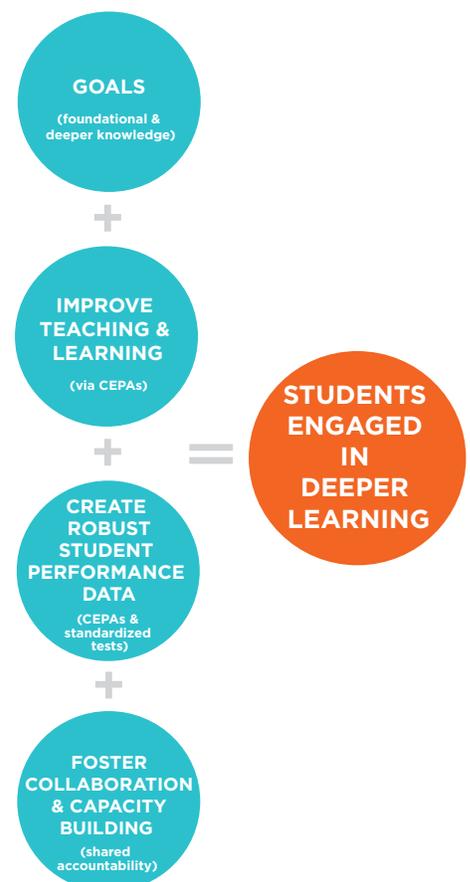
CEPAs provide rich, actionable student outcome data by:

- Ensuring that assessments are responsive to student deeper learning needs and deliver timely feedback for teachers to strengthen proactive instructional practice (Black & Wiliam, 1998)
- Combining various assessments in a holistic framework that blends content and skills (Shavelson, Black, Wiliam, & Coffey, 2007)
- Providing the ability to track and continually monitor student learning through dynamic processes that can be shared with educators, parents, and policymakers (Barboza & Pesek, 2012)

Foster Collaboration and Capacity Building

CEPAs can be employed as a critical part of a continuum of assessment options to meet accountability purposes. To know how to use data to inform instruction and improve student achievement, educators need professional development support to collaborate, design, and deliver CEPAs (Datnow & Hubbard, 2015). By employing instructionally sensitive and educationally valuable tasks that build essential knowledge and skill sets for students, CEPAs contribute information that is fair, reliable, and valid for a variety of educational decision purposes, from the district to state level (Conley & Darling-Hammond, 2013).

Figure 1. A CEPA-based accountability formula for deeper learning



Adapted from *Re-balancing Assessment: Placing Formative and Performance Assessment at the Heart of Learning and Accountability*, p. 11, by P. Hofman, B. Goodwin, and S. Kahl, 2015, Denver, CO: McREL International.

CEPAs can foster collaboration and build educator capacity by:

- Creating a system for monitoring and scoring high-stakes CEPAs that guarantee consistency, reliability, and validity of assessments (Hofman et al., 2015)
- Developing shared assessment measures and tools for educators across districts and states (Massachusetts Department of Elementary and Secondary Education, 2013; Darling-Hammond, 2010)
- Targeting professional development opportunities to use common measures, tools, and assessment data to drive instruction and practice (Datnow & Hubbard, 2015)
- Using new technologies to enable better assessment quality, share timely assessment data, and build information systems that favor accountability (Parsi & Darling-Hammond, 2015)

State and District Examples

A number of schools, districts, and states use CEPAs as tool to measure student learning.

Nebraska. The Department of Education responded to concerns regarding high-stakes standardized testing by implementing the School-based Teacher-led Assessment and Reporting System (STARS) to support curriculum and instruction through multiple measures of assessment. Starting in 2001, the Nebraska Department of Education guided 500 districts in the development of their own assessment systems (Tung & Stazesky, 2010). In one example, the Grand Island Public School District developed curriculum maps that contained district-wide CEPAs for various K–12 subject areas including English, math, social studies, and geography (Partnership for 21st Century Skills, 2009). STARS offered a foundation for improving assessment practice in Nebraska and led to the implementation of related policies, such as Nebraska’s Quality Education and Accountability Act and the Accountability for A Quality Education System, Today and Tomorrow: A QuESTT for Nebraska (Nebraska State Board of Education, 2014).

New Hampshire. The Department of Education began pioneering competency-based performance measures in 2008. New Hampshire is developing statewide performance tasks at the elementary, middle, and high school levels that will be included in a comprehensive state assessment system, in conjunction with assessments aligned with Common Core State Standards (Conley, 2014). New Hampshire’s Performance Assessment for Competency Education (PACE) pilot will use a hybrid assessment model of Smarter Balance, PACE, and local assessments to reduce redundancies and the perception of over-testing (Council of Chief State School Officers, 2015). This system will include common statewide performance tasks, valid and reliable locally designed assessments, an online bank of shared performance tasks, and a network of expert assessment practitioners to assist localities (Parsi & Darling-Hammond, 2015). In 2015, the U.S. Department of Education granted New Hampshire permission to pilot local assessments in select districts over a two-year period to determine efficacy of the state model (Klein, 2015).

Maryland. The Maryland School Performance Assessment Program (MSPAP) and the Maryland Learning Outcomes (MLOs) were adopted in 2002 to examine language usage, math, science, social studies, reading, and writing instruction, professional development, and student learning outcomes (Lane, Parke, & Stone, 2002; Maryland State Department of Education, 2015). MSPAP administered tests to Maryland’s 3rd, 5th, and 8th graders to assess their content mastery and applied knowledge capabilities for complex problem solving (Maryland State Department of Education, 2015). Results of this program indicated that schools where teachers utilized MSPAP had greater math performance gains for students. To meet federal requirements, Maryland replaced MSPAP with the Maryland School Assessment (Maryland State Department of Education, 2008). Maryland highlights how quality assessments can improve teaching and learning while providing actionable data.

Ohio. Performance Assessment Pilot Project (OPAPP), funded through Race to the Top grants, demonstrates a working model for using CEPAs for selected standards in classrooms. As part of this system, Ohio’s Task Dyad utilizes both formative learning tasks and summative assessment tasks to create close alignment in curriculum and instructional practice (Ohio Department of Education, 2012). OPAPP operates with a K–12 educator cohort-teaching model in ELA, math, science, and social studies subjects, as well as career-technical pathways (Ohio Department of Education, 2012). The Ohio experience illustrates the importance of professional development for effective implementation of CEPAs.

Policy Issue	Questions to Consider
<p>Improve teaching and learning</p>	<ol style="list-style-type: none"> 1. How are assessments structured at the district and state level to give feedback and support continuous improvement in teaching and learning? 2. Is there an agreed-upon definition of deeper learning at the school, district, and state levels? If so, how is it being assessed? 3. Do students have multiple opportunities to demonstrate higher-order knowledge and skill sets on district and state assessments? 4. How are educators and curriculum experts collaborating to develop, implement, and create assessment models that ensure alignment with current practice that prioritizes teaching and learning?
<p>Create robust student performance data</p>	<ol style="list-style-type: none"> 1. Are curricula and assessments organized around a defined set of deeper learning measures? Do districts and states have systems for tracking data gathered from CEPAs? 2. How do districts and states use data from both low- and high-stakes assessments to better understand deeper learning outcomes? 3. Do districts and states have systems in place to collect evidence from a variety of assessments and continually track and monitor student learning data that can be easily shared with stakeholders?
<p>Foster collaboration and capacity building</p>	<ol style="list-style-type: none"> 1. Has an inventory of assessments been completed at the district and state level that includes performance-based initiatives and/or CEPAs? What opportunities does this inventory present for collaboration? 2. Have districts and states collaborated through consortia to build joint assessment measures and tools for CEPAs? 3. Do districts and states provide support and funding for professional development to implement CEPAs? 4. What new technologies have been explored to enable better assessment quality, data sharing, and accountability at the district and state levels?

Recommendations

Deeper learning should not be solely a consequence of policy provisions or mandates. Instead, policymakers should consider more meaningful aspects of accountability. The following recommendations may assist policymakers as they consider ways to enact policies that include CEPAs at scale:

- Broaden the focus of teaching and learning to include CEPAs and promote deeper learning at the school, district, and state levels.
- Offer appropriate professional development opportunities for teachers that are consistent with what students must know and be able to do.
- Use CEPAs to advance classroom practice, create better school environments, and foster greater professional collaboration in the K–12 system.
- Employ CEPAs to balance summative and formative assessments within state accountability systems to gain more robust data on high-level learning and skill sets.
- Develop an assessment taskforce in districts and states that involves teachers in ongoing discussions around creating CEPAs, testing their utility, and reviewing the alignment of professional development with school-, district-, and state-level accountability.
- Provide resources for educators to support technological capacity for necessary quality assessments, data collection and dissemination, and accountability.
- Incorporate CEPAs into current accountability systems to ensure schools are adequately preparing students to meet college, career, and real-world challenges without imposition of punitive measures.

References

- Barboza, G. A., & Pesek, J. (2012). Linking course-embedded assessment measures and performance on the Educational Testing Service Major Field Test in Business. *Journal of Education for Business*, 87(2), 102–111.
- Black, P., & Wiliam, D. (1998). Inside the black box: Raising standards through classroom assessment. *Phi Delta Kappan*, 80(2) 139–148.
- Conley, D. T. (2014). Deeper Learning Research Series: *A new era for educational assessment*. Boston, MA: Jobs for the Future.
- Conley, D. T., & Darling-Hammond, L. (2013). *Creating systems of assessment for deeper learning*. Stanford, CA: Stanford Center for Opportunity Policy in Education.
- Darling-Hammond, L. (2010). *Performance Counts: Assessment systems that support high-quality learning*. Washington DC: Council of Chief State School Officers.
- Darling-Hammond, L., & Wood, G. (2008). *Assessment for the 21st century: Using performance assessments to measure student learning more effectively*. Retrieved from <https://web.archive.org/web/20100714155447/http://www.forumforeducation.org/files/u1/pba-paper.pdf>
- Datnow, A., & Hubbard, L. (2015). Teachers' use of assessment data to inform instruction: Lessons from the past and prospects for the future. *Teachers College Record*, 117(4), 1.
- Hofman, P., Goodwin, B., & Kahl, S. (2015). *Re-balancing assessment: Placing formative and performance assessment at the heart of learning and accountability*. Denver, CO: McREL International.
- Heritage, M. (2007, June). *Formative assessment in the classroom*. Presentation to the EED Winter Conference, Informing Instruction, Improving Achievement. Anchorage, AK.
- Klein, A. (2015). N.H. gets green light to pilot local assessments. *Education Week*, 34(24). Retrieved from <http://www.edweek.org/ew/articles/2015/03/18/nh-gets-green-light-to-pilot-local.html>
- Lane, S., Parke, C. S., & Stone, C. A. (2002). The impact of state performance-based assessment and accountability program on mathematics instruction and student learning: Evidence from survey data and school performance. *Educational Assessment*, 8(4), 279–315.
- Lai, E. R. (April 2012). *Creating curriculum-embedded, performance based assessments for measuring 21st century skills in K–5 students*. Vancouver, B.C.: American Educational Research Association.
- Maryland State Department of Education. (2008). Maryland's Accountability Assessment Program. Retrieved from <http://www.marylandpublicschools.org/nr/rdonlyres/9659f357-134c-4040-aeb9-5972246e764d/19193/accountabilityassessmentprogramdec08.pdf>
- Massachusetts Department of Elementary and Secondary Education. (2013, October). *Using current assessment in district-determined measures: Leveraging the curriculum-embedded performance assessments from the model curriculum units*. Retrieved from <http://www.doe.mass.edu/eval/ddm/UsingAssessments.pdf>
- Measured Progress. (2014). 2014 ECS National Forum on Education Policy: Implementing Game-Changing Performance-Based Instruction and Assessment: Two State Approaches [Handout materials]. Retrieved from <http://www.ecs.org/html/NF2014/NF2014agendapresentations/Makingperformancebased-Kahl.pdf>
- National Research Council Board on Testing and Assessment. (2012). *Education for life and work: Developing transferable knowledge and skills in the 21st century*. Washington, DC: National Academies Press.
- Nebraska State Board of Education. (2014). *Accountability for a Quality Education System, Today and Tomorrow: A QuESTT for Nebraska!* Retrieved from <http://www.education.ne.gov/aquestt/Documents/AQuESTTforNebraskaIntro.pdf>
- Ohio Department of Education. (2012). Ohio Performance Assessment Pilot Program: Frequently asked questions. Retrieved from http://education.ohio.gov/getattachment/Topics/Testing/Next-Generation-Assessments/Ohio-Performance-Assessment-Pilot-Project-OPAPP/OPAPP_FAQs_083112-1.pdf.aspx

- Parsi, A., & Darling-Hammond, L. (January 2015). *Performance assessments: How state policy can advance assessments for 21st century learning*. Retrieved from <https://edpolicy.stanford.edu/sites/default/files/publications/performance-assessments-how-state-policy-can-advance-assessments-21st-century-learning.pdf>
- Partnership for 21st Century Skills. (2009). *Curriculum and instruction: A 21st century skills implementation guide*. Tucson, AZ: Author.
- Poon, J. D., & Carr, K. T. (2015). *Evolving coherent systems of accountability for next generation learning: A decision framework*. Washington, DC: Council of Chief State School Officers.
- Shavelson, R. J., Black, P. J., Wiliam, D., & Coffey, J. (2007). *On linking formative and summative functions in the design of large-scale assessment systems* [Report from the Stanford Education Assessment Lab]. Stanford, CA: Stanford Graduate School of Education.
- Tung, R., & Stazesky, P. (2010). *Including performance assessments in accountability systems: A review of scale-up efforts*. Boston, MA: Center for Collaborative Education.