**Classroom Assessment Principles to Support Teaching and Learning**

This is a *draft* document intended to articulate *a shared vision for effective classroom assessment practices* – in preparation for the NCME Special Conference on Classroom Assessment to be held at the University of Colorado Boulder, September 18-19, 2019. The principles identified here were generated and revised by the conference organizers and partners. It is being distributed to conference participants in advance of the event in hopes that speakers might draw connections between their work and the ideas called out in this document. We also invite all participants to offer comments, critique, amendments, or disagreements to further enhance our understanding of the field. Following the conference, our goal is to make revisions and produce a slightly more elaborated and agreed upon version of these principles to serve as a resource for practitioners, especially school leaders and district and state policymakers.

*Classroom assessment* includes both *formative assessment* practices focused on moving learning forward and *summative assessment* used for grading, reporting, and competency determinations. The vision of classroom assessment advanced here is based on sociocultural learning theory, which holds that students’ mental capabilities and ways of being are jointly developed through interaction in their social and cultural context. Importantly, sociocultural theory attends to student identity and sense of belonging as part of learning as well as to the cognitive processes that enhance academic achievement. The assessment principles that follow from this theory are closely connected to ideas about asset-based pedagogies and responsive teaching. In contrast to deficit perspectives, asset-based approaches seek to engage the rich experiences that students bring with them to the classroom by adapting instruction and “responding” to those language and cultural resources. Our assessment principles address equity by fostering student agency and attending to identity and cultural practices from their communities. Although formal instruments and tests are a part of assessment, especially for summative purposes, formative assessment need not rely on formal instruments and is more often effective when embedded in ongoing instructional activity.

The first set of principles below outlines our vision, which is framed from the vantage point of classroom teachers and their students. These principles articulate the actions and commitments needed to create an equity-focused learning culture.

While teachers (and students) are the primary classroom actors, it is unlikely that individual teachers could make all of these fundamental changes on their own without support from school and district leaders. Subsequently, we outline a few examples of what leaders based in schools, districts, and states can do with the collaboration of subject-matter experts, measurement experts, and teacher educators to support a school’s enactment of this vision. These examples are intended to serve as a starting point to spark more ideas from conference participants about how this vision can be supported.

**What should teachers and their students do to enact assessment as part of an equity-focused learning culture?**

1. **Develop a shared understanding of valued learning goals.**

Learning goals are often contested and, even when goal statements seem to be agreed upon, there may not be a shared understanding about what success might look like or how to get there. Especially for the novice learner, we know that understanding what the goal *is* and why it’s important and having good models for what’s expected are all essential conditions for productive learning.

1. **Integrate curriculum, instruction, and assessment based on well-founded theories of learning.**

The development of curricular units of study, instructional activities, and assessment questions, tasks, and observations should be envisioned together. This integrated approach helps maximize the chances for assessment and learning activities to be coherently connected unlike far too many assessment events that are separate from instructional activities. Such co-design requires a fine grained, discipline-specific theory or model of learning. Models of learning include culminating goal statements, but importantly, they also model or describe various pathways reflecting students’ partial and emergent understandings enroute to more complete accomplishment of a goal. Learning progressions are one type of more formally developed model of learning, but more often models of “what to do next” can be supported by informal learning progressions or portfolios of student work collected over time to document both typical patterns and variations in how student thinking develops.

1. **Recognize and build on the knowledge and experiences that students bring from their homes and communities.**

Cognitive research taught us decades ago about the importance of building on prior knowledge for new learning, but this was often taken to mean using prior knowledge taught in school. Today, sociocultural theory and asset-based pedagogies show us the importance of all life experiences as relevant to learning, including students’ “funds of knowledge” or the accumulated body of knowledge, assets and cultural ways of interacting drawn from their homes, communities and influenced by social forces, as well as intuitive understandings of the natural world. Part of respecting student identity as fundamental to learning means inviting students to share experiences and perspectives from their funds of knowledge and drawing connections to learning goals. Connected to the second principle, this principle also calls for developing learning experiences and materials around students’ funds of knowledge to help scaffold their understanding and access to content. Importantly, this type of orientation moves away from a deficit paradigm to more affirming, asset-based conceptions that draw on student strengths and are informed by student experiences and backgrounds.

1. **Ensure that authentic instructional and assessment tasks are drawn from and connect to life outside of school to enhance both meaning and transfer.**

Authentic, real-world tasks are important for initial learning because they help to give meaning and purpose to otherwise decontextualized school work. At the same time, authentic issues and problems connected to students’ lives help to ensure that school learning has relevance beyond the classroom. As noted by the Hewlett Cluster Working Group, “If students understand, embrace, and value assessments as authentic, they will be more likely to view assessments as having genuine worth, both as they experience them and use the information from them to enhance learning” (p. 5).

1. **Help students and teachers establish a productive relationship between formative feedback and summative assessments used for grading.**

Formative feedback is more effective when it is not tied to grades. It is well documented in research studies that when student work is graded, students pay attention to the grade and not to substantive feedback intended to guide improvement. Nonetheless students and teachers should see a relationship between instructional tasks and the kinds of tasks they will ultimately be asked to complete for grading purposes. Similarly, formative feedback should help acquaint students with the features of quality work (a learning goal in its own right) that will be used as criteria to determine grades. *Present-day grading systems that require that grades be recorded every week are not consistent with research on formative assessment, nor does it make sense to evaluate learning while it is still in progress.*

1. **Engage in instructional practices where students talk with each other around meaningful tasks – as a way to elicit and extend student thinking and to help students learn to listen and support the development of each other’s ideas.**

In contrast to traditional teaching approaches dominated by teacher talk, “discourse-based instructional practices” support deep learning by involving students in talking aloud about their reasoning and making it a part of the classroom culture to regularly learn from and critique the reasoning of others. The importance of helping students develop the ability to explain their reasoning and to support an argument with evidence can be seen in today’s standards for both mathematics and science where communication and argumentation skills are seen as fundamental to disciplinary expertise. These interactive strategies help to develop students’ abilities to make meaning and internalize knowledge – thus moving away from memorizing yet enhancing memory by deepening conceptual understanding. Such collaborative inquiry and talk-based instructional practices provide for feedback, self, and peer assessment without the need for formal instrumentation.

1. **Value student ideas by presenting tasks in multiple modes and by using artifacts and other representations to document their thinking and learning.**

In addition to talk-based instructional practices that elicit and build on student thinking, presenting tasks in multiple modes can serve equity goals and affirm a positive learning culture. For example, when teachers ask English Language Learners to draw, speak, listen and write to communicate ideas, using multiple modes provides opportunities for these students to engage in productive language fluency and to work through ideas. If the whole point of formative assessment is to advance learning while still in development, then working on and sharing partially formed ideas has to be a normal part of classroom discussions and activities.

1. **Provide accessible and actionable information about how students and teachers can improve.**

For teachers, both formal and informal assessments are the most useful when they provide specific substantive insights about student thinking -- where student understandings are on firm ground as well as where they are stuck, and more importantly what alternative conceptions might be in the way of making progress. Developing a learning culture also requires that teachers look for patterns that reveal shortcomings in their own instructional decisions and make visible to students how they are revising their teaching to be more responsive to students.

1. **Foster student agency and self-regulation.**

For students to thrive in school and in the world beyond, they need to master not only content knowledge at higher levels but also to develop the skills, awareness, and self-confidence to take responsibility for their own learning. Self-regulated learning involves goal-setting, making plans to achieve goals, monitoring progress, and upon reflection adapting learning approaches to move closer to desired goals. Having students engage in assessment practices such as self-assessment can support the development of self-regulation by providing students with the opportunity to reflect on their work using clear criteria, revise, and set new goals accordingly.

1. **Integrate linguistic and graphical scaffolds recommended for English language learners as a regular part of both instruction and assessment.**

To ensure that equity is baked into instructional and assessment planning, it is important that language supports and multiple modes of explaining ideas be a regular part of on-going instruction. Often supports such as graphical aides, explaining in more than one way, modeling expectations, and deconstructing academic words like “compare” enrich the learning of monolingual English speakers as well as aiding emergent bilinguals.

1. **Avoid grading practices that undermine curiosity and interest, demean students, or distort learning goals.**

Learning goals are undermined if grades and point systems are used to control student behavior. And, decades of research on motivation tells us that some types of “feedback” actually detract from student learning, especially when students are told or see (e.g., on classroom data walls) how their performance compares to that of classmates instead of being helped to see how to improve.

**What can school and district leaders do to support this vision?**

1. **Implement coherent curricular activity systems that integrate curriculum, instruction, and assessment based on well-founded theories of learning.**

The principles listed for school and district leaders require that leaders understand and value the learning-focused vision of instruction and assessment outlined here and then take action to better integrate current investments in curriculum adoption and implementation, professional development, and assessment that very often exist as separate initiatives.

1. **Build collaborations between assessment and curriculum department staff to inform the design and implementation of coherent curricular activity systems in schools.**

One particular strategy to better integrate curriculum and assessment is to bring assessment and curriculum department professionals together to consider implementation of this vision. To support organizational learning, such an effort could be undertaken in just one subject area such as mathematics, science, or literacy, with the idea of more closely integrating what each group of staff experts are asking of teachers and what they are in turn providing for their support. Once progress is made in one subject area, similar efforts could be undertaken with other subjects.

1. **Provide professional development and coaching structures (e.g., time, supports for educator collaboration, etc.) that help to coordinate all of the different new things that teachers are being asked to learn, including learning and motivation theories, asset-based pedagogy, disciplinary practices, and classroom assessment principles.**

Districts already invest in professional development for teachers, most often for implementation of standards, for separate diversity and inclusion trainings, and for data-driven decision making, which has sometimes been shown to undermine diversity goals. The idea here is to provide for educator collaborations such as professional learning communities in ways that provide coordinated and integrated access to the rich, potentially powerful research-base that connects new disciplinary practice standards, asset-based pedagogies, responsive teaching, and learning-focused classroom assessment practices. These different literatures all have a connection to sociocultural theory; and an appreciation for the underlying theory can support implementation in a deep way and forestall mechanistic and regressive interpretations.

1. **Develop or adopt district-level assessments that embody the full range of desired learning goals.**

While classroom formative assessment processes do not require formal instruments, data collection to meet district level needs does require instrumentation. Not only should these instruments meet technical standards for reliability and validity, but these measures have an important role to play in representing to students, parents, and educators what valued learning goals look like. If district assessments tap a limited and easiest-to-measure subset of intended learning, then resulting data will likely give a false picture of learning progress and, more seriously, students will develop the wrong idea about what kind of learning is valued and for what purpose.

1. **Establish grading policies in support of grading practices aimed at establishing clear success criteria, while avoiding the use of grades as motivators.**

Often district grading policies are at odds with research on formative assessment to support learning. These policies should be reexamined in light of learning research and research on motivation. If keeping parents informed is the reason for point systems and weekly postings, then consideration should be given as to whether more substantive ways to share student work could be provided without teacher burden, or if revisions might be possible if students provide evidence of new learning at a later date.

1. **Develop new processes for school improvement and mandated teacher evaluations that better attend to sociocultural learning practices and commitments to equity.**

If students’ identities, interests, and experiences outside of school are fundamental to their learning opportunities, then – as just one example -- evidence could be gathered about how well teachers are able to make these connections. Students could be asked about the relevance of the curriculum to themselves and their community and whether they felt that they had made contributions to the class discussion. Observations of participation and quality of interactions should especially be examined for differences associated with race or gender, and teachers can be supported by coaches and instructional leaders in examining data together to identify and test strategies for improving equity of participation. Such evidence is less likely to be quantifiable in metrics that could be added up to teacher or school “grades,” but providing tools of this type would make the evaluation system more consistent with goals that are truly valued.

**What can states do?**

1. **Articulate a vision for learning and assessment that values classroom and other forms of local assessment.**

Too often state assessments programs are under attack from the public, and, in response, assessment leaders try to defend their programs by affirming their “instructional relevance.” A more defensible stance would be to explain what large-scale, state assessments can do well, i.e., collect comparable data on schools and districts, report on subgroups, and monitor trends over time, and correspondingly to limit the burden (in terms of time and high-stakes consequences) of collecting such data. It would be helpful to acknowledge that state assessments are not particularly useful for making judgments about individual students but can be used to evaluate relative strengths and weaknesses in a school’s curriculum. States could better support effective classroom assessment by articulating a vision and framework for assessment, explicitly explaining the relationship of the state assessment to local assessments.

1. **Develop state-level assessments that embody authentic learning goals and support the development of local systems of balanced assessment.**

Research on teaching-the-test has for decades shown the distorting effects that occur when performance on state tests becomes the sole focus of instruction. More authentic representation of learning goals on state tests can improve the quality and range of instruction. In addition, explicit honoring of high-quality district assessments could go further in broadening understandings about goals for learning.

1. **Provide model curriculum and assessment systems and/or sample curricular units that exemplify the integration of instruction and assessment in support of deep learning.**

While the vast majority of districts nationally have local control over curriculum, it is also true that the majority of districts lack the resources to do deep curricular development including development of rich instructional activities with embedded formative and summative assessments. States can provide model curriculum and assessment systems that explicitly attend to the relationship between state level needs, district needs, and classroom level needs. Although such systems would necessarily still need to be revised to be responsive to local contexts, providing well-integrated models would support educator learning at the local level.

1. **Provide professional development resources for education leaders and teachers to support classroom-based assessments that are grounded in a research-based theory of learning.**

As with the development of curriculum and assessment systems, states can also support a more coherent vision for professional development by considering how state-level implementation of disciplinary standards could be better integrated with diversity and inclusion, responsive teaching initiatives and with a learning-focused vision for classroom assessment. State leaders can also support consortia of districts working together to pool expertise in order to design coaching and teacher support systems that better attend to research on student and teacher learning.

1. **Make sure that the state’s articulated vision for learning and assessment is consistent across state programs.**

In addition to improving state assessments and their use and providing instructional and curricular supports, states should examine whether other state policies and programs are consistent with the intended vision for classroom learning and assessment. For example, states may want to consider if monitoring systems in place for district and school improvement planning and guidance for teacher evaluations allow sufficient flexibility so that districts could engage in coaching and improvement cycles using evidence of classroom talk and equitable participation.

**What can measurement and subject-matter experts do?**

1. **Engage in collaborations to establish linkages between rich classroom level student work and the kinds of quantifications needed for district and state level assessments.**

While quantifications are not the goal at all for the formative assessment that goes on in classrooms, rigorous quantifications are needed for district level assessments and for summative classroom assessments in middle and high schools. Too often, in the name of efficiency, computer-delivered, district-level tests provide an impoverished representations of ambitious learning goals. Measurement and subject-matter expertise are needed jointly to engage in research and development efforts to better connect rich classroom level student work with the kinds of quantifications and sampling needed for district and state level assessments.

1. **Support and perhaps lead efforts to improve classroom assessment literacy that clearly recognizes the need for varied assessment approaches necessary for effective classroom assessment.**

Enacting a learning-focused vision of classroom instruction and assessment requires material resources and professional development for teachers, but it also requires a shared understanding – among teachers, school, district, and state leaders, and policymakers about what this vision entails and how it differs from past practices. Because this vision requires thoughtful integration across areas of expertise that have traditionally been separated, it is critical that measurement and subject-matter experts collaborate in efforts to further develop this vision and that they in turn collaborate with experts in diversity and inclusion and responsive teaching.

**What can teacher educators do?**

1. **Adopt a shared vision for teacher candidate learning about classroom assessment that integrates it with other program commitments to diversity, equity, learning theory, and subject-specific instructional practices.**

The equity-focused vision for classroom assessment outlined by the first eleven principles above is intended to be integrated and ambitious. It does not represent a separate set of “assessment literacy” knowledge and skills. Instead, for such a vision to be meaningfully enacted, teacher candidates must be helped to develop a theoretical understanding of how the principles, grounded in sociocultural theory, are connected; and they must have sufficient support from their instructors and mentors to develop repertoires of practice consistent with these theoretical commitments. Too often in the past, teacher education programs have provided candidates with highly separate and compartmentalized course offerings addressing subject-matter teaching methods, child development and motivation, and assessment (largely focused on summative test construction and grading). This leaves novices with the responsibility of recognizing and resolving contradictions and potentially working in isolation to establish a classroom culture that will be meaningful and coherent for their students. It would be far better if teacher educators constructed a shared vision that embodies these classroom assessment principles to support candidate learning across coursework and practicum experiences.

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