

# PRINCIPLES FOR LEARNING

## A Foundation for Transforming K–12 Education

As six organizations representing 250,000 content-area teachers, administrators, educational technology specialists and other educators, we are united and committed to transforming K-12 education—and, more than anyone else, our members are responsible for achieving this goal. We take this responsibility seriously.

These Principles recognize that learning in all disciplines is complex and individualized. Educators must know the core concepts of their discipline if they are to help students grasp new ideas, solve problems, collaborate, and use their imaginations to pursue challenging questions. Therefore understanding core knowledge in a discipline—how to apply these concepts within and outside of a discipline, and how to teach these concepts effectively—is integral to the Principles outlined here.

We are the pivotal connection between the outcomes envisioned for an innovative education system and the on-the-ground, every day practices that channel every effort, by every teacher and every student, toward rigorous and relevant learning. We have a vital interest and a vital role to play at the heart of teaching and learning. With a unified voice, we have developed Principles for Learning that are right for the educational challenges of our time. We are committed to putting these principles into practice in learning settings all over the country.

### 1. BEING LITERATE IS AT THE HEART OF LEARNING IN EVERY SUBJECT AREA.

Being literate is necessary for learning. As students progress through school and engage with subject areas more deeply, concepts become more challenging. Students use a greater variety of learning resources with more and more complex language and structure and increasingly sophisticated graphical and numerical representations. Students learn writing and reading strategies, using evidence and reasoning pertinent to each subject area, to comprehend and represent knowledge using traditional and emerging media.

Teacher training, professional development, and scholarly reading and writing enable teachers to help students read and write in their subject area. Teachers in each content area know and are able to teach the structure and substance of knowledge in their field.

### 2. LEARNING IS A SOCIAL ACT.

The social nature of learning requires building relationships and engaging with people of many abilities and beliefs. Students actively engage in learning with and from each other through dialogue and reflection. Students work collaboratively, developing an essential skill for participation in the workplace and in civic life. They establish the habit of interacting with others in order to continue to learn and to solve problems in their own lives and in the lives of others. New tools support active connections among learners.

Teachers in every subject area learn together about how to support student learning. Professional development embedded in their work lives places them together for planning and implementing their own continuing learning on behalf of students. Their collaborative learning provides a model for students of how adults and professionals learn.

### 3. LEARNING ABOUT LEARNING ESTABLISHES A HABIT OF INQUIRY IMPORTANT IN LIFE-LONG LEARNING.

Because research indicates that people learn differently across domains, students become knowledgeable about how they learn in each subject area. Learning-how-to-learn classrooms provide access to cross-border ideas and strategies, experts, highly effective teachers, and other inquiring students.

Teachers in every subject area keep current with their discipline through active participation in professional associations, interactions with other teachers, and reading and writing in their subject areas. Like students,

teachers develop the habit of mind that keeps them both knowledgeable and curious about how novices and experts learn within their fields.

#### 4. ASSESSING PROGRESS IS PART OF LEARNING.

Mastering self-direction and reflection is critical for students to learn to self-assess and to set goals for future learning. Students need multiple opportunities to monitor, interpret, and assess their own progress toward learning goals. They also need directive feedback as they progress. Formative assessment contributes to students' awareness of their own progress and enhances their ability to continue to improve.

Teachers use formative assessment of student progress that is continuous, in real time, and useful to guide pedagogical decisions. They also use formative assessment to track their own progress toward instructional goals. Although formative assessment influences summative assessment through improving instruction and learning, it resides with students and teachers for use in improving learning.

#### 5. LEARNING INCLUDES TURNING INFORMATION INTO KNOWLEDGE USING MULTIPLE MEDIA.

Learning to make sense of information transforms it to knowledge and learners into critical thinkers who produce their own information and knowledge. Students use and evaluate appropriate digital tools and resources for the work they are doing in and across subject areas. They find relevant and reliable sources, use digital tools and resources efficiently and ethically, analyze and interpret information, and evaluate conflicting sources. As students use technology for communication, research, and creation of new ideas, the process of knowledge generation establishes students as learners and creative problem solvers.

Teachers keep current about digital tools and applications useful to their own learning and to the learning of their students. They understand and apply the tools and applications that students employ in their out-of-school and in-school lives. They incorporate into instruction those tools and applications best suited for their subject area and continue their own learning as new technologies open access to multiple ways of knowing and learning.

#### 6. LEARNING OCCURS IN A GLOBAL CONTEXT.

Greater accessibility via technology enables students to interact with diverse students and people in their local settings and around the world. Students learn to recognize the ways that others present evidence and build arguments in different societies. Dealing with real world problems expands students' thinking beyond their local context to begin their participation as world citizens.

Teachers necessarily expand their knowledge about people and societies around the world, adopting pedagogies that ensure participation by themselves and their students in global awareness and interaction. They seek cross-cultural experiences to ensure their own development as world citizens.

To support the application of these principles, educational systems must create a culture of inquiry and collaboration that enables all students and teachers to learn for their own sake and for the good of a culturally diverse democratic society in an interdependent world.

We commit to supporting these principles as they support the learning of students and teachers. We will use these principles as the foundation of advocacy on behalf of practices and policies that ensure the best education for all learners.

- Association for Career and Technical Education
- Consortium for School Networking
- National Council for the Social Studies
- National Council of Teachers of English
- National Council of Teachers of Mathematics
- National Science Teachers Association



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