Erin Hunter’s classroom is noisy. Between the power tools, the chatter of students, and the thump of hammers, it’s never been a quiet place. But these days there is an added energy. Her students are solving real-world problems, working as a team, and building their confidence as learners while they build the house they’ll sell at the end of the year.

The same energy exists among Phil Grant’s humanities students as they uncover cellar holes and other clues about the vibrant community that existed 100 years ago in the seemingly untouched woods behind their school. And in Betty Reid’s 1st-grade classroom, students are meeting the New Hampshire state standard on the human body by creating models of their own bodies, including heart, lungs, and joints. What do these classes have in common? Each teacher would describe his or her classroom as a Critical Skills Classroom, using the Critical Skills Model of Instruction from Antioch University New England (O’Leary and Reid 1999).

Some educators might wonder if such instruction is appropriate in an era of high-stakes testing and accountability. But these teachers and others nationwide report that their students do as well as or better than students in traditional classrooms on high-stakes tests. A 2001 study of the Chicago Public Schools found

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THE CRITICAL SKILLS
• Problem solving
• Decision making
• Critical thinking
• Creative thinking
• Communication
• Organization
• Management
• Leadership

THE FUNDAMENTAL DISPOSITIONS
• Ownership of lifelong learning
• Self-direction
• Quality work
• Ethical character
• Curiosity and wonder
• Collaboration
• Community membership

(McGrath 2007)
that students who do work similar to the Critical Skills Classrooms “achieved greater than average gains on the Iowa Tests of Basic Skills in reading and mathematics and demonstrated higher performance in reading, mathematics, and writing on Illinois’ Goals Assessment Program.” The authors went on to conclude that “assignments calling for more authentic intellectual work actually improve student scores on conventional tests” (Newmann, Bryk, and Nagaoka 2001, p. 2).

The Critical Skills model builds powerful lessons in classrooms at all levels. It combines experiential learning, problem-based learning, and rigorous high standards within an intentionally created collaborative learning community, creating classrooms that many educators imagine but can’t quite put together. It is the “how” in answer to the “what” of powerful classroom practice. And it was created, continues to be created, by practicing classroom teachers (McGrath 2007).

In 1984, a collaborative council of business leaders, nonprofit organizations, colleges, the New Hampshire Department of Education, and school districts met to discuss A Nation at Risk. They convened separate groups of business leaders and practicing educators, asking each to determine those qualities most necessary for success. Both groups, independently, came up with a virtually identical set of skills critical for personal and corporate success: the Critical Skills and Fundamental Dispositions.

The question then became, “How do we teach these qualities in the regular classroom, alongside the existing curriculum, without making them an add-on or a separate, discrete program?” What emerged was a comprehensive model that creatively and effectively integrates these powerful teaching methods into a coherent strategy that has become the path to effective classroom practice over the last 25 years.

The four pillars of the model are:

- **Collaborative learning community:** creates a structured and actively maintained classroom culture where teachers and students support the contributions of each member.
- **Experiential learning:** engages students in both active processes and reflection on those processes. Experiential learning offers a multi-sensory, multi-modal environment that allows students to interact in real-life contexts, to construct individual meaning, and to engage in complex actions that mirror life outside school.
- **Problem-based learning:** uses carefully crafted and connected challenges as the primary (but not exclusive) instructional vehicle. These challenges pose a real problem for students to solve, as individuals, in small groups, or as a full learning community.
- **Standards-driven learning:** respects standards set at the classroom, school, district, or state level that define what we want students to know, do, and be like.

Working together, these methods provide the means to simultaneously and intentionally build and sustain a powerful learning community, target the curriculum to provide both a depth of understanding and meaningful learning, develop the critical skills and fundamental dispositions, and meet or exceed the demands of district and state standards. For students, this means they can expect to work in teams, actively solve problems, and make public presentations of their learning. They systematically reflect on what they are doing and learning, focus on standards of quality for their work, and share responsibility for their learning and for the classroom community. Teachers intentionally model, guide, coach, and support the learning process; design learning activities that are carefully connected and built on one another; and incorporate targeted learning standards to guide the classroom culture, curriculum, and assessment. Teachers say that they spend more time guiding students and less time pushing them.

The primary method is the *challenge*, a carefully crafted problem that connects the curriculum to its real-world application. Challenges can be highly complex or quite simple. They may take minutes or weeks to complete. And they are driven by the state, local, or national curricula as well as by the formative assessment gained through ongoing student reflection. Elementary students may grapple with the problem of selecting the largest apple; secondary students might seek alternative energy transportation options for the district or create a new grammar text using only a small set of short stories and newspaper articles. The exact challenges are as diverse as the teachers who create them and the students for whom they are created, but all share three components: students engage, exhibit their learning, and debrief their learning.

**THE TEACHER’S CYCLE**

Critical Skills Teachers move through a three-stage cycle in creating these challenges.

- **Designing** — Deciding what is to be learned, why, and how.
- **Coaching** — Supporting and guiding students through the experience.
- **Giving feedback** — Helping students think about what they did and how well they did it.

Each stage has its own unique char-
characteristics, yet they also overlap. There are no clear boundaries between stages. Coaching doesn’t stop during the feedback process. Feedback happens at all stages of the cycle in informal interaction with students. Each stage must be understood individually, however, before it can be placed fully in context.

**Designing.** In the design stage, teachers prepare a thoughtful plan for student learning. This means thinking through what kinds of results are desired, what the students will be doing, why they’ll be doing it, how the students will know what quality looks or sounds like in their work, what kinds of support the students will need, how to best give them feedback on their products and processes, and how to stimulate student reflection on their learning. In addition, it means thinking through the logistics that have always been part of classroom planning — how students will be grouped, what resources and how much time will be needed, etc.

That sounds like a lot to do, and it is. High-quality experiences require thoughtfulness and planning. It might sound like more than one can handle, but it isn’t. By starting with and executing a basic plan, teachers quickly become comfortable with procedures and prototypes for design. Novices probably will plan a single challenge that follows a fairly simple pattern. As experience and understanding grow, designs will be enriched by additional elements that previously seemed complicated or mysterious. Ultimately, teachers are able to connect challenges to one another and to the big ideas that make learning powerful for students. At the beginning, however, teachers are encouraged to concentrate on two fundamental considerations: 1) how to transform the curricular focus into a problem for students to solve and 2) how to ensure that students are “getting at” the learning standards that make the work important.

**Coaching.** The role of the teacher is complex — shifting from moment to moment to meet diverse needs. Coaching is used as the general descriptor of the teacher’s role. Coaches move students through an experience and help them de-brief that experience. Coaching combines the skillful and timely use of the related roles of facilitator, mentor, inspirational leader, sage, co-learner, and mediator, employing tools that strengthen work toward learning standards.

Coaching is placed second in the cycle. However, the role of coach is not isolated in time, nor is it linked to only one phase of the student learning cycle. Coaching is the fundamental attitude that characterizes student/teacher interactions over time in a Critical Skills classroom.

Critical Skills teachers say that they spend more time guiding students and less time pushing them.

**Giving feedback.** Assessment in a Critical Skills classroom is defined as opening and maintaining a reflective and personalized dialogue with students regarding their growth toward learning standards — a process that requires constant feedback. This feedback flows from teacher to student, from students to their peers, and from student to teacher.

We’ve placed assessment under the broader heading of feedback because beyond the reality of “producing grades” lies the oft-forgotten real purpose of assessment: to maintain a dialogue around quality that nurtures student development.

Assessment is intended to encourage student self-reflection and self-adjustment. Assessments measure student work against clearly defined, co-created quality criteria. Assessments are meaningful, carefully considered, and arise authentically from the learning standards.

Assessment begins in the design phase, where quality criteria and exhibit options are identified within the challenge. Assessment continues throughout the phases of engagement as students reflect on their work as it aligns with the criteria. Likewise, the process of debriefing becomes an evaluation exercise as students apply their criteria to their completed work. Finally, assessment includes record keeping as a means of documenting student growth.

For most of us, this represents a shift from our experience in schools and from our teacher training. However, for students to be truly equipped for life, they need a reasonably accurate portrait of the quality of their work. And to meet ever-shifting student and societal needs, assessment and improvement of our own practice should be both a model and vehicle for quality.

**THE STUDENTS’ CYCLE**

Students engage in a parallel cycle in which they are:

**Engaging** — Solving a real-world problem that has meaning and importance in their lives;

**Exhibiting** — Sharing their learning in public ways; and

**Debriefing** — Reflecting on their products and processes in order to better understand and build on their strengths.

**Engaging.** During engagement, students work on the problem. The phase begins with students’ first contact with a challenge. As they start to construct a basic understanding of what’s being asked of them, they make decisions about the value of the work, about their
level of interest, about their willingness to participate, and about the roles they are willing to assume.

Most problems require that students produce a final product as an exhibition of a chosen learning standard. Product examples might be a proposal, a poster, or a model. In the engagement phase, students are either given the criteria to judge quality or they help to identify them. They interact with group members to establish roles and responsibilities, set goals, and formulate strategies.

**Exhibiting.** Problem-based challenges are performance-based. This means students are asked to demonstrate their learning, their products, and their processes. Exhibitions are repeated opportunities for students to demonstrate what they understand and can do.

The most frequently used method of exhibition is a presentation to the class and, at times, to others from the school or community who are invited to give constructive feedback to the students. Other possible exhibitions are papers, proposals, learning centers, graphic organizers, pamphlets, or web sites, whatever format provides the most appropriate evidence that students are developing knowledge, understanding, and skills.

**Debriefing.** Students do a great deal in school. What is too often missing is the opportunity to think about what they’re doing — its meaning, how it connects to other things they’ve done, how it connects to their lives. The process of learning is diminished when it’s based on unexamined experience alone. Thinking time is learning time; furthermore, learning is most effectively transferred to new experiences by reflecting on the work.

Through debriefing, students have time to think about the meaning of their experiences. Debriefing may take the form of a group discussion, or it may involve journal writing or other reflective techniques. During debriefing, students are encouraged to look at the completed challenge “event” from the perspective of “What happened?” (nonevaluative reflection), “What is the significance of what happened?” (evaluative reflection), and “What do we do with what we have learned from this experience?” These three might be more directly stated as “What?” “So what?” and “Now what?”

Twenty-five years and thousands of teachers and students later, research is telling us what so many Critical Skills teachers know to be true: The model works. According to E.C. Wragg, Caroline Wragg, and Rosemary Chamberlin in an evaluation of the Critical Skills Programme on the Isle of Jersey (UK):

> The neatest summary of the programme comes from children themselves. The last question in the questionnaire filled in by 744 of them asked what they thought in general about the critical skills programme. Analysis of their responses showed that 86% rated it as “good” or better, while only 3% said it was “poor.”

Our overall conclusion is that the critical skills programme in Jersey empowers, rather than inhibits teachers, enhances pupils’ learning, and is appropriate for its purpose of preparing children for adult life in the 21st century. (Wragg, Wragg, and Chamberlin 2004)

In a 2003 study conducted internally, all the teachers surveyed found the Critical Skills Institutes an effective approach for their students, though they were equally divided between Very Effective, Effective, and Somewhat Effective. No teachers ranked them as ineffective (Morrison 2003).

The Critical Skills classroom is authentic, it is intellectual, and it is rigorous. It requires that students work at the highest levels of thinking while it also provides the supports to create the safest of environments. The Critical Skills classroom insists that the responsibility for learning move from the teacher to the student, but it provides the procedures to do so successfully.

**REFERENCES**


“It’s only an ‘outdoor classroom’ because the school district can’t afford buildings.”