Organizing for Effort

An effort-based school replaces the assumption that aptitude determines what and how much students learn with the assumption that sustained and directed effort can yield high achievement for all students. Everything is organized to evoke and support this effort, to send the message that effort is expected and that tough problems yield to sustained work. High minimum standards are set and assessments are geared to the standards. All students are taught a rigorous curriculum, matched to the standards, along with as much time and expert instruction as they need to meet or exceed expectations.

1. A clear, high, minimum set of standards that every student is expected to meet is established in each subject.
2. All students are taught a curriculum that prepares them to meet the standards.
3. Additional instruction and learning time is provided for students who need it in order to meet the standards.
   a. Tutoring or specialized small group instruction is available for children who are beginning to fall behind average learning level of the class.
   b. Title I funds are used to provide after-school and weekend classes, not for "pullout" instruction during school time. Some special education funds are also used this way.
   c. Staff assignments are organized so that maximum time of all adults in the school is used for group or individual instruction.
   d. Arrangements are made with other agencies in the community (e.g., community centers, scouts, 4-H, after school day-care operators) to provide tutoring and other learning support activities that are linked to the curriculum students are studying in school.
   e. Community funding sources for weekend and summer school programs have been tapped.
   f. Volunteer tutors (including older students) are used and are organized and trained for their tutoring work.
   g. Parents and families understand why extra study time is needed and support the program.
   h. Homework includes practical suggestions for family activities that will support student learning.
4. When there are special learning opportunities, a willingness to do the work is the primary admission criterion.
5. Students are responsible for completing academic work that has been specified and negotiated.
6. There are specified bodies of work (e.g., reading a certain number of books, writing a research paper, performing school service) that students must accomplish by the end of key stages of schooling.
Clear Expectations

If we expect all students to achieve at high levels, then we need to define explicitly what we expect students to learn. These expectations need to be communicated clearly in ways that get them "into the heads" of school professionals, parents, the community and, above all, students themselves. Descriptive criteria and models of work that meets standards should be publicly displayed, and students should refer to these displays to help them analyze and discuss their work. With visible accomplishment targets to aim toward at each stage of learning, students can participate in evaluating their own work and setting goals for their own effort.

1. Standards that include models of student work are available to and discussed with students.
   a. Standards and rubrics are posted in the classroom and discussed with students.
   b. Students work with portfolios that contain the standards and rubrics.
   c. Students in the class can describe the substance of what they are trying to learn.
   d. Students can show you examples of their work and describe the criteria they are trying to meet.
   e. Students have been involved in explicating the criteria for work that meets the accomplishment standard (e.g., charts or rubrics are stated in student terms).
   f. Teacher feedback is given to students in terms of the standards and rubrics.

2. Students judge their work with respect to the standards.
   a. Students use rubrics to judge their work products.
   b. Students engage in peer conferences in which clear criteria are used to evaluate and revise work.
   c. Students engage in teacher conferences in which clear criteria are used to evaluate and revise work.
   d. Students select work for portfolio submissions based on explicit criteria.
   e. Students know clearly when they have and have not met the intermediate expectations and standards.

3. Intermediate expectations leading to the formally measured standards are specified.
   a. For every grade level, a sequence of expected concepts and skills is specified that leads explicitly to the formally measured standards.
   b. For each element in the sequence, there are rubrics and models of student work.
   c. Teaching is conducted in a way that highlights the important concepts and skills that students are expected to learn.

4. Families and community are informed about the accomplishment standards that children are expected to achieve.
   a. Good work displays for families and community take place regularly and are well attended.
b. There are occasions when students explain to family and community their work and the
criteria for judging it.

c. Parents know the standards and intermediate expectations toward which their children
are working.

d. A reporting system exists that explains how students are doing in relation to the
standards and intermediate expectations.

Fair and Credible Evaluations

If we expect students to put forth sustained effort over time, we need to use assessments that
students find fair; and that parents, community, and employers find credible. Fair evaluations
are ones that students can prepare for: therefore, tests, exams and classroom assessments—as
well as the curriculum—must be aligned to the standards. Fair assessment also means grading
against absolute standards rather than on a curve, so students can clearly see the results of
their learning efforts. Assessments that meet these criteria provide parents, colleges, and
employers with credible evaluations of what individual students know and can do.

1. Exams and tests are referenced to standards and designed to be studied for. The exams and
tests are valid when students directly prepare to take them.

2. Exams, tests, and classwork are graded against absolute standards, not on a curve.

3. A reporting system exists that makes it clear to students and their parents how they are
progressing toward expected standards.

4. Assessments validly test the full range of adopted standards.

5. Curriculum and assessments are aligned.

6. "Public accountability" assessment instruments and "instructional assessments" are aligned.

Recognition of Accomplishment

If we expect students to put forth and sustain high levels of effort, we need to motivate them by
regularly recognizing their accomplishments. Clear recognition of authentic accomplishment is a
hallmark of an effort-based school. This recognition can take the form of celebrations of work
that meets standards or intermediate progress benchmarks en route to the standards. Progress
points should be articulated so that, regardless of entering performance level, every student can
meet real accomplishment criteria often enough to be recognized frequently. Recognition of
accomplishment can be tied to opportunity to participate in events that matter to students and
their families. Student accomplishment is also recognized when student performance on
standards-based assessments is related to opportunities at work and in higher education.

1. Frequent and regular occasions for recognizing student accomplishment linked to standards
are established.

2. Recognitions mark real accomplishment—meeting a standard or intermediate expectations.
3. Enough clearly demarcated progress points are set so that all students experience recognition and celebration of their accomplishments periodically.

4. Families and other community members who matter to students participate in celebrations and recognition events.

5. Employers and colleges recognize and ask for evidence of academic accomplishments for high school students.

**Academic Rigor in a Thinking Curriculum**

Thinking and problem solving will be the "new basics" of the 21st century. But the common idea that we can teach thinking without a solid foundation of knowledge must be abandoned. So must the idea that we can teach knowledge without engaging students in thinking. Knowledge and thinking are intimately joined. This implies a curriculum organized around major concepts that students are expected to know deeply. Teaching must engage students in active reasoning about these concepts. In every subject, at every grade level, instruction and learning must include commitment to a knowledge core, high thinking demand, and active use of knowledge.

**Commitment to a Knowledge Core**

The ability to think well goes hand-in-hand with rich stores of knowledge. In each field of learning, there is a core of knowledge and conceptual understanding that all students should learn. This knowledge core should be specified in rigorous academic standards. The standards can then serve as the basis for an articulated curriculum in which core concepts are taught and learned in considerable depth, along with skills and tools of the discipline.

1. There is an articulated curriculum in each subject that avoids needless repetition and progressively deepens understanding of core concepts.

2. The curriculum and instruction are clearly organized around major concepts specified in the standards.

3. Teaching and assessment focus on students’ mastery of core concepts.

**High Thinking Demand**

Students will learn thinking abilities best when thinking is infused throughout the curriculum. Each subject should be taught in ways that press students to pose and solve problems; to formulate conjectures and hypotheses and to justify their arguments; and to construct explanations and test their own understanding. These high thinking demands, normal in programs for the gifted and talented, should be the daily fare of all students.

1. In every subject, students are regularly expected to raise questions, to solve problems, to think, and to reason.

2. Students are doing challenging, high-level assignments in every subject.

3. Assignments in each subject include extended projects in which original work and revision to standards are expected.

4. Students are challenged to construct explanations and to justify arguments in each subject.
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5. Instruction is organized to support reflection on learning processes and strategies.

Active Use of Knowledge

People only acquire robust, lasting knowledge if they themselves do the mental work of making sense of it. Good teaching is a matter of arranging for students to do their own knowledge construction, while assuring that the ideas students develop will be in good accord with known facts and established concepts.

1. Each subject includes assignments that require students to synthesize several sources of information.

2. Students in each subject are challenged to construct explanations and to test their understanding of concepts by applying and discussing them.

3. Students’ prior and out-of-school knowledge is used regularly in the teaching and learning process.

4. Instructional tasks and classroom discourse require students to interpret text and construct solutions.

Accountable Talk

Talking with others about ideas and work is fundamental to learning. But not all talk sustains learning. For classroom talk to promote learning it must be accountable--to the learning community, to accurate and appropriate knowledge, and to rigorous thinking. Accountable talk seriously responds to and further develops what others in the group have said. It puts forth and demands knowledge that is accurate and relevant to the issue under discussion. Accountable talk uses evidence appropriate to the discipline (e.g., proofs in mathematics, data from investigations in science, textual details in literature, documentary sources in history) and follows established norms of good reasoning. Teachers should intentionally create the norms and skills of accountable talk in their classrooms.

Engagement with Learning through Talk

1. A substantial portion of instructional time involves students in talk related to the concepts delineated in the standards.

   a. Throughout the school day, in all subject areas, there is a high amount of talk directly related to the content being studied.
   b. A high percentage of classroom talk is by and among students.
   c. Students participate in various forms of Accountable Talk, such as instructional discussions, whole class discussions, small group work, peer and student-teacher conferences, presentations, and interviews.

2. Accountable Talk sharpens students’ thinking by reinforcing their ability to build and use knowledge. Teachers create the norms and skills of Accountable Talk in their classrooms by modeling appropriate forms of discussion and by questioning, probing, and leading conversations.
For example, teachers may

- press for clarification and explanation
- require justifications of proposals and challenges
- recognize and challenge misconceptions
- demand evidence for claims and arguments
- interpret and "revoice" students’ statements

Over time, students can be expected to carry out each of these conversational "moves" themselves in peer discussions.

**Accountability to the Learning Community**

1. Students actively participate in classroom talk.
   a. Each student is able to participate in several different kinds of classroom talk activities.
   b. Students' talk is appropriate in tone and content to the social group and setting and to the purpose of the conversation.
   c. Students allow others to speak without interruption.
   d. Students speak directly to other students on appropriate occasions.

2. Students listen attentively to one another.
   a. Students' body language/eye contact show attention.
   b. When appropriate, students make references to previous speakers.
   c. Speakers' comments are connected to previous ideas.
   d. Participants avoid inappropriate overtalk.
   e. Participants' interest is in the whole discussion, not only in their own turn taking.

3. Students elaborate and build upon ideas and each others' contributions.
   a. Talk remains related to text/subject/issue.
   b. Related issues or topics are introduced and elaborated.
   c. Talk is about issues rather than participants.

4. Students work toward the goal of clarifying or expanding a proposition.
   a. Students revoice, summarize, paraphrase each other's argument(s).
b. Students make an effort to ensure they understand one another.

c. Students clarify or define terms under discussion.

Accountability to Knowledge

1. Students make use of specific and accurate knowledge.
   a. Students make specific reference to a text to support arguments and assertions.
   b. Students make clear reference to knowledge built in the course of discussion
   c. Examples or claims using outside knowledge are accurate, accessible, relevant.

2. Students provide evidence for claims and arguments.
   a. Unsupported claims are questioned and investigated by discussion participants
   b. Requests are made for factual information, elaboration, rephrasing and examples.
   c. Students call for the definition and clarification of terms under discussion.
   d. Students challenge whether the information being used to address a topic is relevant to
      the discussion.

3. Students identify the knowledge that may not be available yet which is needed to address an
   issue.

Accountability to Rigorous Thinking

1. Students synthesize several sources of information.
   a. Students refer to a variety of texts as sources of information.
   b. Students connect ideas within and between texts.
   c. Students use previous knowledge to support ideas and opinions.

2. Students construct explanations.
   a. Students acknowledge that more information is needed.
   b. Students use sequential ideas to build logical and coherent arguments.
   c. Students employ a variety of types of evidence.

3. Students formulate conjectures and hypotheses.
   a. Students use "what if" scenarios as challenging questions or supporting explanations.
   b. Students formulate hypotheses and suggest ways to investigate them.

   c. Students indicate when ideas need further support or explanation.
4. Students test their own understanding of concepts.
   a. Students re-define or change explanations.
   b. Students ask questions that test the definition of concepts.
   c. Students draw comparisons and contrasts among ideas.
   d. Students identify their own bias.
   e. Students indicate to what degree they accept ideas and arguments.

5. Classroom talk is accountable to generally accepted standards of reasoning.
   a. Students use rational strategies to present arguments and draw conclusions.
   b. Students provide reasons for their claims and conclusions.
   c. Students fashion sound premise-conclusion arguments.
   d. Students use examples, analogies, and hypothetical "what if" scenarios to make arguments and support claims.
   e. Students partition argument issues and claims in order to address topics and further discussion.

6. Students challenge the quality of each other's evidence and reasoning.
   a. The soundness of evidence and the quality of premise-conclusion arguments are assessed and challenged by discussion participants.
   b. Hidden premises and assumptions of students' lines of argument are exposed and challenged.
   c. Students pose counter-examples and extreme case comparisons to challenge arguments and claims.

7. Classroom talk is accountable to standards of evidence appropriate to the subject matter.

Socializing Intelligence

Intelligence is much more than an innate ability to think quickly and stockpile bits of knowledge. Intelligence is a set of problem-solving and reasoning capabilities along with the habits of mind that lead one to use those capabilities regularly. Intelligence is equally a set of beliefs about one's right and obligation to understand and make sense of the world, and one's capacity to figure things out over time. Intelligent habits of mind are learned through the daily expectations placed on the learner. By calling on students to use the skills of intelligent thinking--and by holding them responsible for doing so--educators can "teach" intelligence. This is what teachers normally do with students they expect much from; it should be standard practice with all students.
Beliefs
- I have the right and obligation to understand and make things work better.
- Problems yield to sustained effort.

Skills
- Cognitive
- Social

Dispositions
- Habits of mind
- Tendency to actively try to analyze problems, ask questions, and get information

2. Students acquire and use strategies for appropriately getting and giving help in learning.
3. Staff communicate to all students that they are already competent learners and are able to become even better through their persistent use of strategies and by reflecting on their efforts.
5. Students are persistent when working on challenging problems.
6. Students regularly expect to do "better than before."

Self-management of Learning

If students are going to be responsible for the quality of their thinking and learning, they need to develop—and regularly use—an array of self-monitoring and self-management strategies. These metacognitive skills include noticing when one doesn’t understand something and taking steps to remedy the situation, as well as formulating questions and inquiries that let one explore deep levels of meaning. Students also manage their own learning by evaluating the feedback they get from others; bringing their background knowledge to bear on new learning; anticipating learning difficulties and apportioning their time accordingly; and judging their progress toward a learning goal. These are strategies that good learners use spontaneously and all students can learn through appropriate instruction and socialization. Learning environments should be designed to model and encourage the regular use of self-management strategies.

1. Within the context of instruction and learning in the various subject areas, metacognitive strategies are explicitly modeled, identified, discussed, and practiced.
   a. Teachers model ways that people notice and regulate their own learning processes.
   b. Teachers call attention to students’ effective use of self-management strategies, making overt the thought processes that are usually carried out internally.
c. Students can talk about their self-monitoring and self-management strategies: what they are, why they are using them, and how they help them learn in specific situations.

d. Students and teachers comment on the quality of questions, inquiries, explanations that arise in the course of content-area study.

2. Students are expected and taught to play an active role in monitoring and managing the quality of their learning.

a. Students regularly check their understanding by paraphrasing or restating concepts in their own words, explaining things to themselves, asking themselves questions, extending ideas, and checking new information against their background knowledge.

b. Students notice and can talk about how clearly, fully, and deeply they understand something.

c. Students objectively assess their work against standard-meeting models and ask for instruction or coaching when they need it.

d. Students can predict how their products and performances will be evaluated.

e. Students regularly gauge how much time and effort will be required to accomplish a learning task or achieve a learning goal. They plan their steps and pace themselves accordingly.

3. Teachers scaffold students' performance during initial stages of learning, then gradually remove supports.

a. During early learning, teachers play an active role in monitoring students' understanding, anticipating how long tasks will take and where learning difficulties will occur, and deciding when further explanation or direction is needed. Students carry out these functions themselves as their competence grows.

b. Students assume increasing control over the conditions of their learning, such as use of resources, sequencing of activities, and conditions of work.

c. As students begin to take over the management of their learning, teachers may ask them to reflect on and discuss the strategies they use.

**Learning as Apprenticeship**

For many centuries most people learned by working alongside an expert who modeled skilled practice and guided novices as they created authentic products or performances for interested and critical audiences. This kind of apprenticeship allowed learners to acquire complex interdisciplinary knowledge, practical abilities, and appropriate forms of social behavior. Much of the power of apprenticeship learning can be brought into schooling by organizing learning environments so that complex thinking is modeled and analyzed, and by providing mentoring and coaching as students undertake extended projects and develop presentations of finished work, both in and beyond the classroom.

1. A substantial portion of instruction and learning occurs in the context of extended, interdisciplinary projects culminating in presentations of finished work.
2. Student products meet publicly agreed upon standards of quality.

3. Experts from within the school or from the community critique and guide student work.

4. Learning strategies and thinking are overtly modeled and discussed.