Best Practice Indicators

Growth does not necessarily mean moving from one practice to another, discarding a previous instructional approach and replacing it forever. Instead, teachers add new alternatives to a widening repertoire of choices, allowing them to alternate among a richer array of activities, creating a more complex balance (e.g., lecturing isn't discarded, but is done less as other, new choices become available).

Physical Facilities
Setup for teacher-centered instruction (separate desks) → Student-centered arrangement (e.g. tables)
Rows of desks → Clusters → Centers (varied learning stations for writing, computers, match, etc.)
Bare, unadorned space → Commercial decorations → Student-made artwork/products/displays
Few materials → Textbooks and handouts → "Stuff" – books, materials, manipulatives, pets, etc.

Classroom Climate/Management
Management by punishments and rewards ➔ Order maintained by engagement and community
Teacher creates and enforces rules ➔ Students help set and enforce norms
Students are silent/motionless/passive/controlled ➔ Purposeful talk, movement, and autonomy
Students in fixed groups based on "ability" ➔ Flexible grouping based on tasks and choice
Rigid, unvarying schedule ➔ Predictable but flexible time usage based on activities

Student Voice and Involvement
➔ Students often select inquiry topics, books, writing topics, audiences, etc.
➔ Students maintain their own records, set own goals, self-assess
➔ Some themes/inquiries are built from students' own questions; "negotiated curriculum"
➔ Students assume responsibility, take roles in decision making, help run classroom life

Activities and Assignments
Teacher presentation and transmission of material ➔ Students actively experiencing concepts
Whole-class teaching ➔Centers and cooperative small groups ➔Wide variety of activities
Teacher in front, directing whole class ➔Teacher hard to find, working with groups
Uniform curriculum for all ➔Jigsawed curriculum; different topics by kids' needs or choices
Short-term lessons; one day at a time ➔Extended activities, multi-day, multi-step projects
Focus on memorization and recall ➔Focus on applying knowledge and problem solving
Short responses; fill-in-the-blank exercises ➔Complex responses, evaluations, writings, artwork

Language and Communication
Forced constant silence → Noise and conversation alternates with quite time
Short responses → Elaborated discussion → Students' own questions and evaluations
Teacher → Student-teacher talk → Student-student talk
Writing: All channels are open (student-teacher, student-student, student-parent)
Talk and writing focuses on: Facts → Skills → Concepts → Synthesis, Evaluation

Time Allocations
Time allocations are BALANCED between:
- Teacher-directed and student-directed work
- Subject-specific lessons and integrated, thematic, cross-disciplinary inquiries
- Individual work/small-group or team work/whole-class work
- Intensive, deep study of selected topics/extensive study of wide range of subjects

Fundamental recurrent activities happen on daily/regular basis
- Independent reading (SSR, reading workshop, or literature circles)
- Independent writing (journals or writing workshop)
- Reading aloud to students
- Teacher-student and student-student conferences

Students can explain the time allocations and recurrent activities/procedures in their classrooms

Student Work and Assessment
Products created for teachers and grading → Products created for real events and audiences
Classroom/hallway displays: no student work posted → "A" papers only → All students represented
Identical, imitative products displayed → Varied and original products displayed
Teacher feedback is scores and grades → Teacher feedback is substantive, varied, and formative
Products are seen and rated only by teachers → Public exhibitions and performances are common
Teacher gradebook → Student-maintained portfolios, with self-assessments and conferences
All assessment by teachers → Student self-assessment an official element → Parents are involves
Standards set during grading → Standards available in advance → Standards codeveloped with students

Teacher Attitude and Initiative
Toward Students:
Distant negative, fearful, punitive → Positive, respectful, encouraging, warm
Blaming students → Reasoning with students
Directive → Consultative
Toward Self:
Helpless victim → Risk taker/Experimenter → Creative, active agent
Solitary adult → Member of team with other adults in school → Member of networks beyond school
Staff development recipient → Chooses and directs own professional growth
Conception of Job Roles
Expert, presenter → Coach, mentor, model, guide

BEST PRACTICE IN TEACHING READING

Increase	Decrease
Reading aloud to students	
Time for independent reading	Exclusive stress on whole class or reading-group activities.
Children's choice of their own reading materials	Teacher selection of all reading materials for individuals and groups.
Exposing children to a wide and rich range of literature.	Relying on selections in basal reader
Teacher modeling and discussing own reading processes	Teacher keeping her own reading tastes and habits private
Primary instructional emphasis on comprehension	Primary instructional emphasis on reading subskills such as phonics, word analysis, syllabication
Teaching reading as a process:	
Use strategies that activate prior knowledge	Teaching reading as a single, one-step act
Help students make and test predictions	
Structure help during reading	
Provide after-reading application	
Social, collaborative activities with much discussion & interaction	Solitary seatwork
Grouping by interests or book choices	Grouping by interests or book choices
Silent reading followed by discussion	Round-robin oral reading
Teaching skills in the context of whole and meaningful of literature	Teaching isolated skills in phonics workbooks or drills
Writing before and after reading	Little or no chance to write
Encouraging invented spelling in children's early writings	Punishing pre-conventional spelling in students' early writings
Use of reading in content fields (e.g., historical novels in social studies)	Segregation of reading to reading time
Evaluation that focuses on holistic, higher-order thinking	Evaluation focused on individual, low-level subskills
Measuring success of reading program by students' reading habits, attitudes, and comprehension	Measuring the success of the reading program only by test scores.

BEST PRACTICE IN TEACHING WRITING

Increase	Decrease
Student ownership and responsibility by:	Teacher control of decision-making by:
Helping students choose their own topics and goals for improvement	Teacher deciding on all writing topics
Using brief teacher-student conferences	Suggestions for improvement dictated by teacher
Teaching students to review their own progress	Learning objectives determined by teacher alone
	Instruction given as whole-class activity
Class time spent on writing whole, original pieces, through:	Time spent on isolated drills on "subskills" of grammar, vocabulary, spelling, paragraphing, penmanship, etc.
Establishing real purposes for writing, and students' involvement in the task	Writing assignments given briefly, with no context or purpose, completed in one step
Instruction in, and support for, all stages of writing process	
Pre-writing, drafting, revising, editing	
Teacher modeling writing – drafting , revising, sharing – as a fellow author, and as demonstrator of processes	Teacher talks about writing but never writes or shares own work
Learning of grammar and mechanics in context, at the editing stage, and as items are needed	Isolated grammar lessons, given in order determined by textbook, before writing is begun
Writing for real audiences, publishing for the class and for wider communities	Assignments read only by teacher
Making the classroom a supportive setting for shared learning, using:	Devaluation of students' ideas through:
Active exchange and valuing of students' ideas	Students viewed as lacking knowledge/language abilities
Collaborative small group work	Sense of class as competing individuals
Conferences and peer critiquing that give responsibility for improvement to authors	Work with fellow students viewed as cheating, disruptive
Writing across the curriculum as a tool for learning	Writing taught only during "language arts" period (i.e., infrequently)
Constructive and efficient evaluation that involves:	Evaluation as negative burden for teacher and student by:
Brief informal oral responses as students work	Marking all papers heavily for all errors, teacher a bottleneck
Thorough grading of just a few of student-selected, polished pieces	Teacher editing paper, and only after completed, rather than student making improvements
Focus on a few errors at a time	Grading seen as punitive, focused on errors, not growth
Cumulative view of growth and self-evaluation	
Encouragement of risk-taking and honest expression	

BEST PRACTICE IN TEACHING MATHEMATICS

Increase	Decrease
Use of manipulative materials	Rote practice
Cooperative group work	Rote memorization of rules and formulas
Discussion of mathematics	Single answers and single methods to find answers
Questioning and making conjectures	Use of drill worksheets
Justification of thinking	Repetitive written practice
Writing about mathematics	Teaching by telling
Problem-solving approach to instruction	Teaching computation out of context
Content integration	Stressing memorization
Use of calculators and computers	Testing for grades only
Being a facilitator of learning	Being the dispenser of knowledge
Assessing learning as an integral part of instruction	
MATHEMATICS AS PROBLEM SOLVING	**MATHEMATICS AS PROBLEM SOLVING**
Word problems with a variety of structures and solution paths	Use of cue words to determine operation to be used
Everyday problems and applications	Practicing routine, one-step problems
Problem-solving strategies	Practicing problems categorized by types
Open-ended problems and extended problem-solving projects	
Investigating and formulating questions from problem situations	
MATHEMATICS AS COMMUNICATION	**MATHEMATICS AS COMMUNICATION**
Discussing mathematics	Doing fill-in-the-blank worksheets
Reading mathematics	Answering questions that need only yes or no responses
Writing mathematics	Answering questions that need only numerical responses
Listening to mathematical ideas	
MATHEMATICS AS REASONING	**MATHEMATICS AS REASONING**
Drawing logical conclusions	Relying on authorities (teacher, answer key)
Justifying answers and solution processes	
Reasoning inductively and deductively	
MATHEMATICAL CONNECTIONS	**MATHEMATICAL CONNECTIONS**
Connecting mathematics to other subjects and to the real world	Learning isolated topics
Connecting topics within mathematics	Developing skills out of context
Applying mathematics	
NUMBERS/OPERATIONS/COMPUTATION	**NUMBERS/OPERATIONS/COMPUTATION**
Developing number and operation sense	Early use of symbolic notation
Understanding the meaning of key concepts such as: place value, fractions, decimals, ratios, proportions, and percents	Complex and tedious paper and pencil computations Memorizing rules and procedures without understanding
Various estimation strategies	
Thinking strategies for basic facts	
Using calculators for complex calculation	
GEOMETRY/MEASUREMENT	**GEOMETRY/MEASUREMENT**
Developing spatial sense	Memorizing facts and relationships
Actual measuring and the concepts related to units of measure	Memorizing equivalencies between units of measure
Using geometry in problem solving	Memorizing geometric formulas
STATISTICS/PROBABILITY	**STATISTICS/PROBABILITY**
Collection and organization of data	Memorizing formulas
Using statistical methods to describe, analyze, evaluate, and make decisions	
PATTERNS/FUNCTIONS/ALGEBRA	**PATTERNS/FUNCTIONS/ALGEBRA**
Pattern recognition and description	Manipulating symbols
Identifying and using functional relationship	Memorizing procedures and drilling
Developing and using tables, graphs, rules to describe situations	
Using variables to express relationships	
EVALUATION	**EVALUATION**
Having assessment be an integral part of teaching	Having assessment be simply counting correct answers on tests for the sole purpose of assigning grades
Focusing on a broad range of mathematical tasks and taking a holistic view of mathematics	Focusing on a large number of specific and isolated skills
Developing problem situations that require applications of a number of mathematical ideas	Using exercises or word problems requiring only one or two skills
Using multiple assessment techniques, including written, oral, and demonstration formats	Using only written tests

BEST PRACTICE IN TEACHING SCIENCE

Increase	Decrease
Hands-on activities that include:	Instruction based mainly on lecture and information-giving
Students identifying their own real questions about natural phenomena	Dependence on textbooks and lock-step patterns of instruction
Observation activity, often designed by students, aimed at real discovery, employing a wide range of process skills	Cookbook labs in which students follow steps without a purpose or question of their own
Students hypothesizing to explain data	Questions, concepts, and answers provided only by the teacher
Information provided to explain data only after students have engaged in investigation process	Students treated as if they have no prior knowledge or investigative abilities
Students' reflection to realize concepts and processes learned	
Application, either to social issues or further scientific questions	
Focus on underlying concepts about how natural phenomena are explained	Memorizing detailed vocabulary, definitions, and explanations without thorough connection to broader ideas
Questioning, thinking, and problem solving, especially:	Science approached as a set body of knowledge with all answers and information already known
Being skeptical, willing to question common beliefs	
Accepting ambiguity when data isn't decisive	
Willing to modify explanations, open to changing one's opinion	Attempts to correct student misconceptions by direct instruction
Using logic, planning inquiry, hypothesizing, inferring	
Active application of science learning to contemporary technological issues and social choices	Isolation of science from the rest of students' lives
In-depth study of a few important thematic topics	Superficial coverage of many topics according to an abstract scope-and-sequence
Curiosity about nature and positive attitudes toward science for all students, including females and members of minority groups	Sense that only a few brilliant "nerds" can enjoy or succeed in science study
Integration of reading, writing, and math in science unit.	Activity limited to texts, lectures, and multiple-choice quizzes.
Collaborative small-group work, with training to ensure it is efficient and includes learning for all group members	Students working individually, competitively
Teacher facilitating students' investigative steps	Teacher only as expert in subject matter
Evaluation that focuses on scientific concepts, processes, and attitudes	Testing focused only on memorization of detail, ignoring thinking skills, process skills, attitudes

BEST PRACTICE IN TEACHING SOCIAL STUDIES

Increase	Decrease
In-depth study of topics in each social studies field, in which students make choices about what to study, and discover the complexities of human interaction	Cursory coverage of a lock-step curriculum that includes everything but allows no time for deeper understanding of topics
Emphasis on activities that engage students in inquiry and problem solving about significant human issues	Memorization of isolated facts in textbooks
Student decision-making and participation in wider social, political, and economic affairs, so that they share a sense of responsibility for the welfare of their school and community	Isolation from the actual exercise of responsible citizenship; emphasis only on reading about citizenship or future participation in the larger social and political world
Participation in interactive and co-operative classroom study processes that bring together students of all ability levels	Lecture classes in which students sit passively: Classes in which students of lower ability levels are deprived of the knowledge and learning opportunities that other students receive.
Integration of social studies with other areas of the curriculum	Narrowing social studies activity to include only textbook-reading and test-taking
Richer content in elementary grades, building on the prior knowledge children bring to social studies topics: This includes study of concepts from psychology, sociology, economics, and political science, as well as history and geography. Students of all ages can understand, within their experience, American social institutions, issues for social groups, and problems of everyday living.	Assumption that students are ignorant or uninterested in issues raised in social studies Postponement of significant curriculum until secondary grades
Students' valuing, and sense of connection with, American and global history, the history and culture of diverse social groups, and the environment that surrounds them	Use of curriculum restricted to only one, dominant cultural heritage
Students' inquiry about the cultural groups they belong to, and others represented in their school and community, to promote students' sense of ownership in the social studies curriculum	Use of curriculum that leaves students disconnected from, and unexcited about social studies topics
Use of evaluation that involves further learning and that promotes responsible citizenship and open expression of ideas	Assessments only at the end of a unit or grading period; assessments that test only factual knowledge or memorization of textbook information