Topic	Traditional approach	Alternate approaches
Person	Teacher-centred instruction: • Educational essentialism • Educational perennialism	Student-centred instruction: • Educational progressivism
Classroom	Students matched by age, and possibly also by ability. All students in a classroom are taught the same material.	Students dynamically grouped by interest or ability for each project or subject, with the possibility of different groups each hour of the day. Multi-age classrooms or open classrooms.
Teaching methods	Traditional education emphasizes: • Direct instruction and lectures • Seatwork • Students learn through listening and observation	Progressive education emphasizes: • Hands-on activities • Student-led discovery • Group activities
Materials	Instruction based on textbooks, lectures, and individual written assignments	Project-based instruction using any available resource including Internet, library and outside experts
Subjects	Individual, independent subjects. Little connection between topics	Integrated, interdisciplinary subjects or theme-based units, such as reading a story about cooking a meal and calculating the cost of the food.
Social aspects	Little or no attention to social development. Focus on independent learning. Socializing largely discouraged except for extracurricular activities and teamwork-based projects.	Significant attention to social development, including teamwork, interpersonal relationships, and self-awareness.
Multiple tracks	• A single, unified curriculum for all students, regardless of ability or interest. • Diverse class offerings without tracking, so that students receive a custom-tailored education. • With School to work, academically weak students must take some advanced classes, while the college bound may have to spend half-days job shadowing at local businesses.	Students choose (or are steered towards) different kinds of classes according to their perceived abilities or career plans. Decisions made early in education may preclude changes later, as a student on a vo-tech track may not have completed necessary prerequisite classes to switch to a university-preparation program.
Student and	Students often address teachers	In alternative schools, students may be

teacher relationship	formally by their last names. The teacher is considered a respected role model in the community. Students should obey the teacher. Proper behavior for the university or professional work community is emphasized.	allowed to call teachers by their first names. Students and teachers may work together as collaborators.

Marking

Topic	Traditional approach	Alternate approaches
Communicating with parents	A few numbers, letters, or words are used to summarize overall achievement in each class. Marks may be assigned according to objective individual performance (usually the number of correct answers) or compared to other students (best students get the best grades, worst students get poor grades). A passing grade may or may not signify mastery: a failing student may know the material but not complete homework assignments, and a passing student may turn in all homework but still not understand the material.	Many possible forms of communicating achievements: • Teachers may be required to write personalized narrative evaluations about student achievement and abilities. • Under standards-based education, a government agency may require all students to pass a test; students who fail to perform adequately on the test may not be promoted.
Expectations	Students will graduate with different grades. Some students will fail due to poor performance based on a lack of understanding or incomplete assignments.	All students need to achieve a basic level of education, even if this means spending extra years in school.
Grade inflation/deflation	Achievement based on performance compared to a reasonably stable, probably informal standard which is highly similar to what previous students experienced.	The value of any given mark is often hard to standardize in alternative grading schemes. Comparison of students in different classes may be difficult or impossible.

Subject Areas

Topic	Traditional approach	Alternate approaches
Mathematics	Traditional mathematics: • Emphasis is on memorization of basic facts such as the multiplication table and	• Curriculum de-emphasizes procedural knowledge drills in favor of technology (calculators, computers) and an emphasis on conceptual

	mastering step-by-step arithmetic algorithms by studying examples and much practice. • One correct answer is sought, using one "standard" method. • Mathematics after elementary grades is tracked with different students covering different levels of material. • Mathematics is taught as its own discipline without emphasis on social, political or global issues. There may be some emphasis on practical applications in science and technology.	understanding. • Lessons may include more exploratory material supportive of conceptual understanding, rather than direct presentation of facts and methods. • Emphasis may be on practical applications and greater issues such as the environment, gender and racial diversity, and social justice. • Mathematics lessons may include writing, drawing, games, and instruction with manipulatives rather than filling out worksheets. • Lessons may include exploration of concepts allowing students to invent their own procedures before teaching standard algorithms. • Grading may be based on demonstration of conceptual understanding rather than entirely on whether the final answer is correct. • In some countries (e.g. the United States), there may be expectations of high achievement and mastering algebra for all students rather than tracking some students into business math and others into mathematics for math and science careers.
Science	Fact-based science: Science class is an opportunity to transmit concrete knowledge and specific vocabulary from the teacher (or textbook) to the students. Students focus on memorizing what they are told. "Experiments" follow cookbook-style procedures to produce the expected results.	With Inquiry-based Science a student might be asked to devise an experiment to demonstrate that the earth orbits the sun. The emphasis changes from memorizing information that was learned through a scientific method to actually using the scientific method of discovery.
Language learning	Phonics: The focus is on explicit training in sound to letter correspondence rules and the mechanics of decoding individual words. Students initially focus on phonics subskills and reading	With whole language the child is exposed to rich, relevant language that can heighten motivation to read. Learning to read is assumed to be as natural as learning to speak, so students are not formally taught sound to letter

simplified decodable texts. When they have mastered a sufficient number of rules, they are allowed to read freely and extensively. (In many languages, such as French, Spanish and Greek, phonics is taught in the context of reading simple open syllables.)

correspondences, but assumed to infer them on their own. (Note that this issue is limited to languages such as English and French with complex phonetics and spelling rules. Instruction in countries with languages such as Spanish and Greek, which have relatively simple phonetic spelling, still depends mainly on phonics.)

Criticism of the concept of teaching in traditional education

Traditional education focuses on teaching, not learning. It incorrectly assumes that for every ounce of teaching there is an ounce of learning by those who are taught. However, most of what we learn before, during, and after attending schools is learned without it being taught to us. A child learns such fundamental things as how to walk, talk, eat, dress, and so on without being taught these things. Adults learn most of what they use at work or at leisure while at work or leisure. Critics argue that most of what is taught in classroom settings is forgotten, and much of what is remembered is irrelevant.