

*Create a two-sided developmental chart of the age child you intend to teach. List developmental attributes on the left hand side of your chart. On the right hand side of your chart list educational implications of the developmental attributes. Categories should include the following: physical, psychosocial, and cognitive development.*

The table below applies to high school students, grade 9 through 12, aged from approximately 14 to 17 years.

Developmental Attributes	Educational Implications
Physical	Physical
Most students reach physical maturity, and virtually all attain puberty (p. 91*).	Because of the tremendous variation in height and weight, accommodations may be necessary. Simple examples are weight classes in wrestling and arrangement of students on risers for chorus.
Late-maturing boys seem to have considerable difficulty adjusting to their slower rate of growth (p. 91*).	The variation in maturation rate can result in self-esteem problems which affect learning. Teachers may need to help students feel good about themselves and confident in their ability to learn.
Early maturing boys tend to engage in more delinquent behavior (p. 133*).	Affiliation with older adolescents can put them into situations they are not prepared to handle and get them into trouble. Schools can prevent non-students from entering or recruiting on campus. Attendance must be dealt with and adults should be available to help students with problems, even nonacademic issues.
Glandular changes leading to acne may be a source of worry and self-consciousness to some students (p. 92*).	Courses such as health can not only explain the biology, but also help students deal with the worry and self-consciousness.
Many adolescents become sexually active (p. 92*).	Students may be more distracted than usual in class. Realistic sex education should be taught in school. It must recognize that some students will be having sex and not withhold crucial information. It may also help students distinguish between sex and love (p. 92*). Schools must have guidelines for what kinds of sexual or suggestive activities are allowed or not on campus. Parent approved activities such as supervised dances can help students deal with their feelings in a safe environment.
Some students will become parents (p. 93*).	Students with parental responsibilities may have difficulty attending day school. Options such as night school can be made available. Schools can assist with day care and even provide parenting classes.
Some students will contract STDs (p. 93*).	Students will need diagnosis and treatment. Tests might be made available at school to identify the condition quickly and to help prevent spread. Accurate information must be provided about the diseases as well as effectiveness of multiple methods of prevention.

Psychosocial	Psychosocial
According to Erikson, students are working through the identity versus role confusion stage (p. 91*).	Occupational choice becomes a concern (p. 91*). Discussions about jobs and careers may be well received. Guest speakers representing different professions can describe their work. Since students are also dealing with sexual identities, it would be good to demonstrate how both men and women can do all kinds of work.
Concerns arise about gender roles (p. 91*), and sexual orientation and gender identity continue to form (p. 393*).	Discourage harassment and calling of names, and encourage a multicultural classroom. Speak of these issues in courses like health or psychology.
Parents and other adults are likely to influence long-range plans; peers are likely to influence immediate status (p. 93*).	Parents may need assistance keeping abreast of classroom developments. Teachers and schools should help keep parents in the loop, especially about influences on long-range plans, such as grades and aptitudes. In addition, they can provide parents with access to the more immediate classroom events with a class website, newsletter, or answering machine message.
Conflicts arise between parents and children about peer-influenced issues (p. 93*).	In courses such as psychology or health, peer pressure and parenting styles like those identified by Baumrind can be addressed. Students should know how children fare for each style.
Girls seem to experience greater anxiety about friendships than boys do (p. 94*).	Direct competition between girls, especially friends, should be avoided in favor of cooperative learning activities. Boys may be more enthusiastic about competing and better served with this option.
Girls can become very concerned about the reactions of others (p. 94*).	They may be very reluctant to express unpopular opinions. Teachers should not allow put downs or disparaging comments, which may be prohibited by class rules already. Students can play devil's advocate rather than admitting to a personal opinion.
Many high school students are employed after school (p. 94*).	There may be less time and flexibility for homework and less energy for learning. Students should be apprised of the homework load as early as possible so that they can manage their time better. Due dates for homework, especially last minute assignments, should be flexible. Unemployed students can learn a lot from experiences of others. Assignments can be made relevant to students' jobs, not only their interests.
Many psychiatric disorders either appear or become prominent during adolescence. Included among these are eating disorders, substance abuse, schizophrenia, depressions, and suicide (p. 94*).	Teachers should be on the lookout for these disorders and make sure they are addressed, possibly by a counselor or nurse. In classes like health and psychology, students can be taught of these problems, their symptoms, and treatments. Assemblies or special presentations can be held if classes are not available.

The most common type of emotional disorder during adolescence is depression (p. 95*).	Students may act out simply as a call for help; educators can attend to this possibility. Teachers should teach mastery and steer students away from learned helplessness, explaining the difference and teaching strategies. Some schools make it a point to have at least one adult familiar with every student and available for help. Group activities can provide opportunities for friendships to form. Teachers can help students experience as much success as possible in school (p. 95*).
If depression becomes severe, suicide may be contemplated (p. 95*).	Since an unstable family situation is a contributing factor (p. 96*), teachers who have established contact with families and know of the situation can watch all the better for warning signs. Some schools provide educational programs on depression and suicide (p. 96*). Teachers should avoid shaming or humiliating students, especially vulnerable ones, but rather offer interest and sympathy
Students may advance to the empathetic orientation level of prosocial reasoning (p. 408+).	Students may be easily recruited to assist an unlucky classmate or may better appreciate and understand stories in history or literature about someone else's situation.
Bonds within cliques loosen and students begin associating with several groups. However, crowds may form (p. 432+).	Teachers may find it easier to create successful heterogeneous groups. The school as a whole may want to provide opportunities appealing to each of the major crowds that form. Students may emulate bad examples from their fellow crowd members.
Play tends toward leisure activities including video and computer games, movies, music, and sports in which students excel (p. 447+).	Educators should be prepared to confiscate many portable music devices if that's the school policy. Teachers can consider podcasting lectures and issuing computer game time rewards.
Cognitive	Cognitive
Students are increasingly able to engage in mental manipulations, understand abstractions, and test hypotheses (p. 91*).	Educators can incorporate these activities directly into lesson plans, especially mental manipulations in computer programming, abstractions in math, and hypotheses in science. Give students the opportunity to explore many hypothetical questions and to solve problems and reason scientifically (p. 280^).
Students are more willing to think of rules as mutual agreements (p. 91*), a characteristic of Kohlberg's fifth stage of moral reasoning.	Take advantage and let students buy into rules that they help formulate in order to obtain better cooperation. Explain how the rules are mutually beneficial. Kohlberg suggests exposing students to the next higher stage of reasoning and to situations posing problems and contradictions for their current stage in an atmosphere of interchange and dialogue (p. 283^).

High school students become increasingly capable of engaging in formal thought, but they may not use this capability (p. 97*).	Teachers can take advantage of opportunities to show students how they can function as formal thinkers by calling attention to relationships and to ways that previously acquired knowledge can be applied to new situations (p. 97*). Real-world problem solving can be incorporated (p. 99*). Educators can teach broad concepts, not just facts, using materials and ideas relevant to the students' lives (p. 280^).
Students may suffer from at least two forms of adolescent egocentrism: the imaginary audience and personal fable (p. 188-189 <sup>+</sup> )	Teachers should not unnecessarily draw even more attention to already overly self-conscious students, especially not to point out harmless mistakes they have made. In literature classes, development novels may compel readers. Teachers can keep an eye out for exceptionally risky behavior.
Between the ages of twelve and sixteen, political thinking becomes more abstract, liberal, and knowledgeable (p. 97*).	Students can participate much more actively in courses like social studies, history, government, and economics, possibly forming their own systems. In other courses, students can help form class rights and responsibilities, answer questions about the probable consequences of their actions, and decide on appropriate reactions to misbehavior.
Adolescents move beyond basic facts. They begin to appreciate layers of information representing different viewpoints or theories (p. 274 <sup>+</sup> ).	For example, history courses might describe events from differing perspectives; biology can be discussed at the cellular, organismic, and ecological levels (p. 274 <sup>+</sup> ).
Students increase in metalinguistic awareness (p. 314 <sup>+</sup> ).	Students can self-monitor and self-correct speech (p. 314 <sup>+</sup> ) and presumably writing, so that requiring multiple drafts or rehearsals of work may be effective. Students can evaluate and critique their own work. Foreign language may be taught with more grammar rules.
The adolescent register and genderlects become more prominent and personal narratives include more evaluation (p. 315 <sup>+</sup> ).	Teachers, especially in English, can help students select the appropriate register for the situation (e.g., in a poem versus a research paper). The personal narrative can be used for writing assignments.
Awareness of language structure can result in sarcasm, puns, argumentation, and slang (p. 279^).	Educators can learn to expect these behaviors, rather than (over)react to them, and help ensure that they have a time and place.

Much of this information is taken, sometimes verbatim, from

\*Snowman, J. & Biehler, R. (2006). *Psychology Applied to Teaching (Eleventh Edition)*. Boston: Houghton Mifflin Company.

<sup>+</sup>Cook, J.L. & Cook, G. (2005). *Child Development*. Boston: Pearson Education, Inc.

<sup>^</sup>Parkay, F.W. & Stanford B.H. (2004). *Becoming a Teacher (Sixth Edition)*. Boston: Pearson Education, Inc.