Deconstructing the Myths:

Housing Development Versus School Costs

by William Ray, New Hampshire Housing Finance Authority

In the last decade, New Hampshire has experienced a major population boom. From 1993 to 2003, the state's population increased by 14.8 percent, a faster growth rate than experienced by any other New England state. The rise in population has driven economic growth and generated new tax revenue for the state, but it has also created a crisis in housing. Today, rapidly rising home prices, higher rents, and record low vacancy rates are presenting a housing affordability challenge for many New Hampshire citizens, and the lack of reasonably priced housing is hampering the state's economic growth. The impact is not insignificant. Employers are having difficulty recruiting and retaining their workforce in the heated housing market, and as a result, the state is foregoing an estimated 2,800 new jobs each year.

While many factors contribute to the shortage of affordable housing, at its heart, the crisis is a straightforward story of supply and demand. New Hampshire's rising population has generated a sizable demand for new housing units, but the growing need has not been met with the appropriate level and variety of new housing stock. The shortage has caused prices to shoot up. The median purchase price of a single family home in 2004 was $280,000, well out of reach for most of the state's newly formed households. Priced out of the starter home market, many families have turned to the rental option, only to find that rents are just as unaffordable. Median rents have risen 6.6 percent a year since 1995, and apartments are increasingly hard to find as vacancy rates float just above 2 percent.

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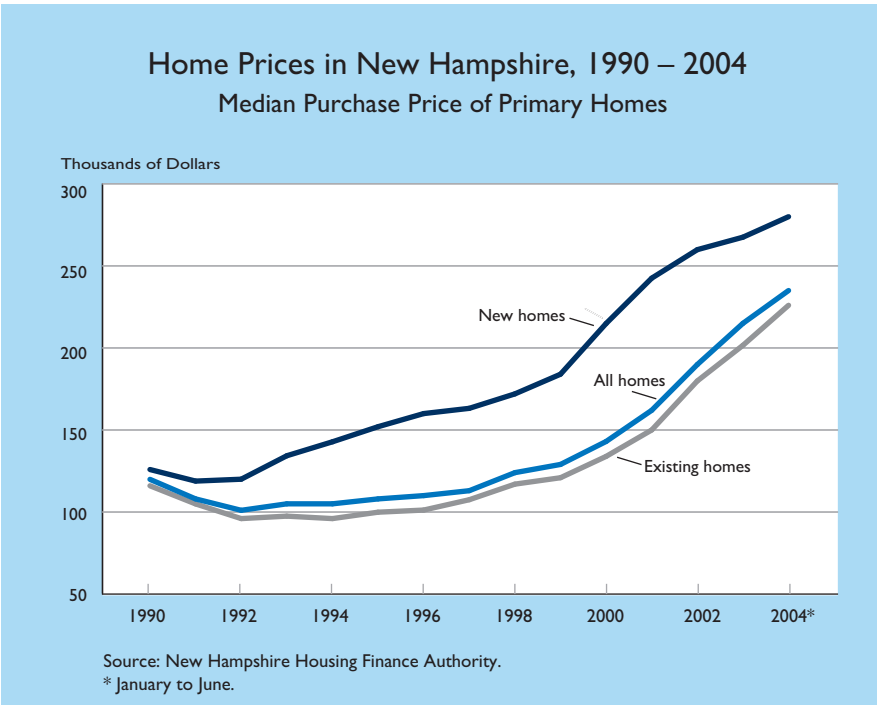


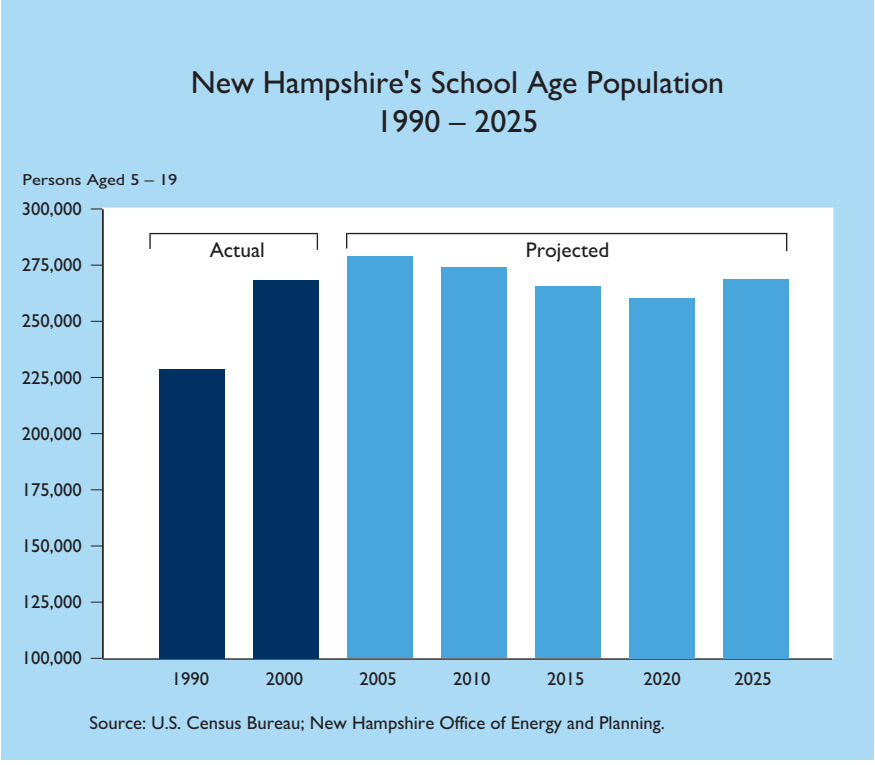
The state's low rate of housing production during the 1990s is partly to blame for the lack of supply, but in recent years, the story has grown more complex. According to a study commissioned by the Workforce Housing Council, aggregate housing production rates have reached levels that closely match employment and population growth. However, the production of moderately priced homes, starter homes, and rental units remains low, continuing the squeeze on New Hampshire families. Rather, the bulk of new housing production is in high-end single family housing or age-restricted housing. Why is the market supplying high-priced and senior housing in lieu of the housing that is most needed? A big reason—schools.

An Issue of Local Control

While the amount, type, and affordability of the state's housing stock are determined by economic and market conditions, these factors are also influenced by local government decisions. In New Hampshire, the majority of land-use determinations are made at the local level. Counties have no say in city and town land-use management, and the state's role is limited to overseeing environmental controls, highway placement, and state parks. In this situation, local land-use laws—such as growth control, zoning, and subdivision ordinances—significantly affect the cost and supply of housing. While most of New Hampshire's 224 localities agree that the state's housing crisis must be addressed, many have adopted a "not in my back yard" stance, slowing the development of housing within their borders. The municipal resistance is primarily generated by fear—fear of increasing taxes; fear of depreciating home values; and fear of crime, traffic, noise, and urbanization. Of these, the fear of increasing taxes has most directly distorted new housing production away from units geared toward families.

In New Hampshire, on average, two-thirds of local property taxes go to local school expenditures. The high relative cost of education has made municipalities hesitant to permit housing development that will increase the number of school-aged children in the public schools. It is not an unreasonable concern. In the last decade, school enrollment has increased twice as fast as the total population, growing 24 percent since 1993. This exceptional growth has stressed classroom capacity and school resources in many communities, forcing some to raise property taxes.

To try to better manage school enrollment growth and property tax bills, municipalities have begun evaluating each housing development proposal



for its fiscal impact on the community. An assessment is performed comparing the estimated annual cost of providing municipal services to each new household, including schooling, with the property tax revenue generated by the home. While the calculation is useful, communities frequently make a number of unsupported assumptions concerning school enrollment that have an adverse influence on housing development in the state. These myths warrant examination.

Challenging the Myths

The New Hampshire Housing Finance Authority is a state-chartered organization committed to creating affordable housing opportunities for low- and moderate-income people. Recently, NHHFA recognized that some of the imbalance in the housing market was driven by municipalities' misconception of the actual fiscal impact of new housing. With a more accurate picture of the budget effects, NHHFA believed localities would be willing to refashion local land-use controls in ways that would encourage a broader range of housing types and prices. NHHFA embarked on a campaign to provide factual information to municipal officials and the public to help ease concerns about new affordable housing in the state. As part of this campaign, NHHFA asked Russell Thibeault of Applied Economic Research to analyze the correlation between school enrollment and housing using demographic data from the U.S. Census Bureau. The results of his study are beginning to challenge the myths.

Myth 1
"Housing development is responsible for school crowding!"

The 1990s saw a rapid growth in public school enrollment. But, was it the direct result of new housing development? It is natural to assume that when houses are being built and enrollment is increasing rapidly, a cause and effect relationship exists. However, Thibeault found that two-thirds of the enrollment growth in the 1990s was attributable to the children of existing residents entering school rather than the product of new growth. His results suggest that even if no new housing development had occurred, there still would have been a significant increase in enrollment. Thus, the effect of new development on school enrollment is substantially smaller than the conventional wisdom would have it. Rather than new people moving in, the enrollment surge was the result of the "baby boom echo" generation, the children of the large baby boom cohort, matriculating into the school system. In both New Hampshire and the country as a whole, schools have been under stress ever since this population "bubble" reached school age.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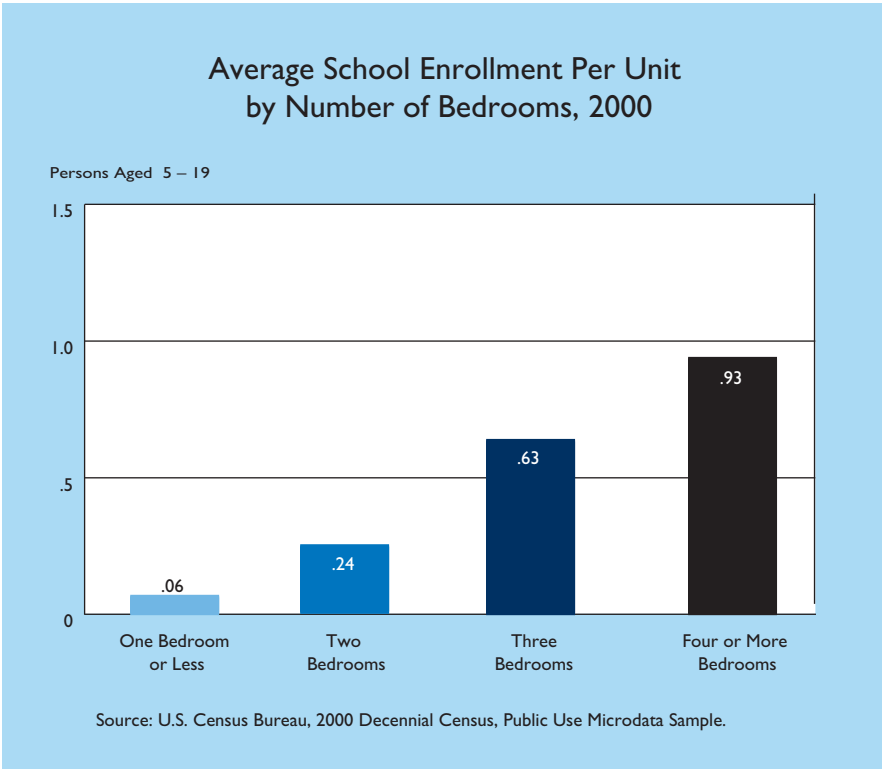
But the numbers are tapering. The "baby boom echo" is now exiting local schools, and the era of rapid growth in the school-aged population is ending. In fact, New Hampshire's projected demographics show school enrollment peaking in 2005 and subsequently beginning to decline.

While the aging of the baby boom echo population will relieve pressure on the schools, it will complicate problems in the housing market. As high school students graduate, they will enter the housing market, adding more demand, particularly for rental housing. Given the lack of rental housing production in the state, it is possible that many of the state's young people will face a lack of affordable housing options. Municipalities will have to consider these



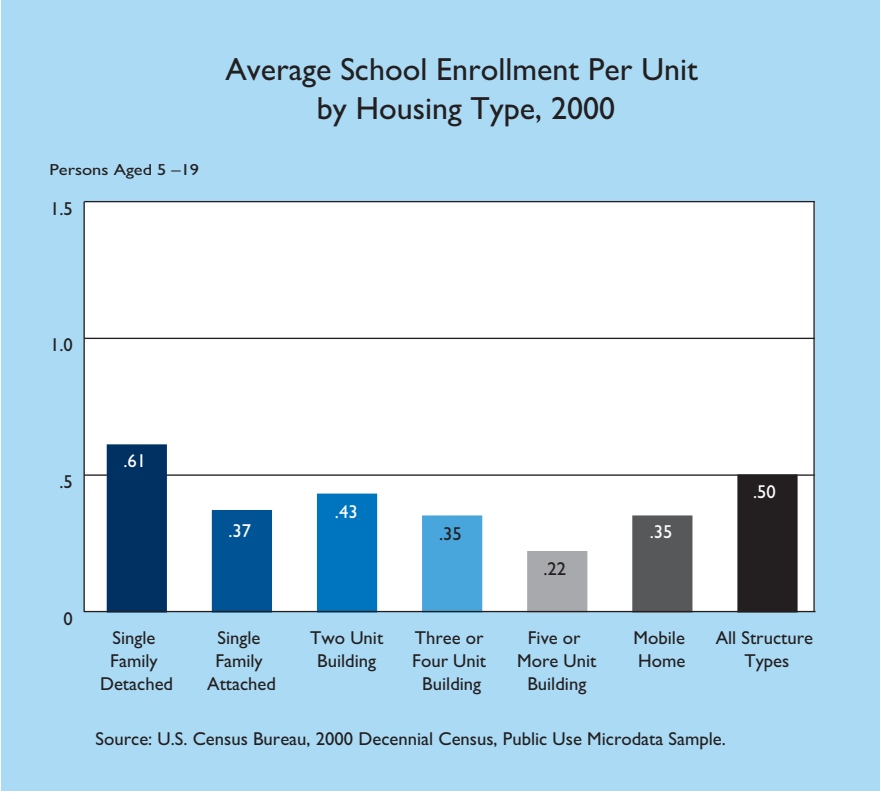
demographic shifts and their impact on local finances.

In the midst of statewide population trends, individual municipalities will experience a variety of demographic shifts in the coming years. Some cities and towns will indeed continue to see their school-aged populations increase—with or without new development. For others, in the absence of new residential development, school enrollment will decline in the next decade, perhaps forcing the closure or consolidation of schools. According to the Town of Sandwich's master-plan committee, the housing market is already having this effect: "Enrollment in our schools continues to decline as young families, unable to find land or homes within their financial reach, opt to settle elsewhere."

Myth 2
"Each house we permit adds two children to our schools!"

Perhaps drawn from the standard image of family, two kids per household is the rule of thumb used by most towns in their financial impact analyses. Using this number generally shows that housing is a losing proposition for most towns. As shown in the table on page 7, the average new housing unit in New Hampshire generates $7,500 in property tax revenue. If you assume the household includes two school children and per-pupil spending on education is $10,000, then the schooling costs of the new household are $20,000. The difference between the expected costs and revenue indicate that housing development is a big loser for any municipality. Even without considering the costs of other municipal services, annual property taxes do not come close to covering school costs.

However, the assumption that the average new housing unit generates two students is problematic in several ways. First, even if most households have two children, students age over time and leave the school system. Similarly, households move and are replaced by a variety of family and non-family households that may make less extensive use of schooling and municipal services. As a result of this fluidity, there are times when a housing unit will yield substantial net income to a municipality. Secondly, the two-child rule of thumb may not be an accurate measure. Thibeault tested this rule by looking at a statewide snapshot of the number of students currently generated per unit of housing. He found that school enroll-



Fiscal Impact Assessment of a New Single Family Home

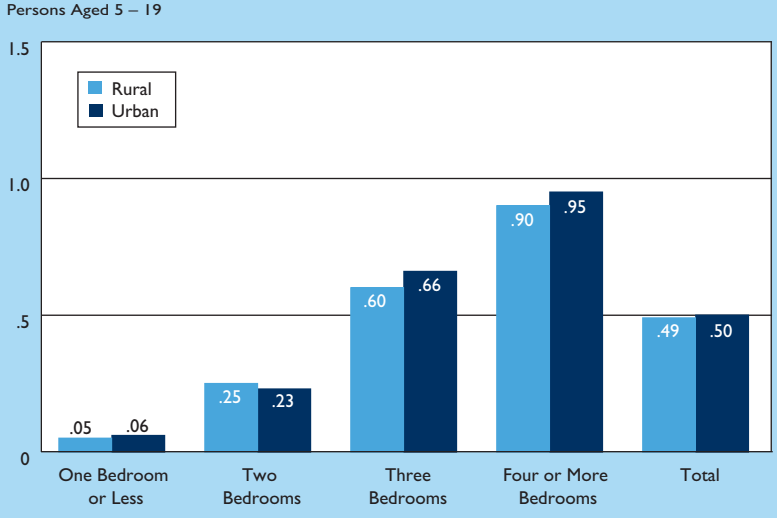
"Two Child Rule of Thumb"		versus	"Revised Student Enrollment"	
Annual Revenues				
Per Pupil Expenditures	($10,000)		Per Pupil Expenditures	($10,000)
x Students Generated	2		x Students Generated	0.7
Total Costs	($20,000)		Total Costs	($7,000)
Annual Costs				
Average New Home Value	$375,000		Average New Home Value	$375,000
x Property Tax Rate	2.0%		x Property Tax Rate	2.0%
Property Tax Revenue	$7,500		Property Tax Revenue	$7,500
Annual Impact	($12,500)			$500

ment per housing unit is not two students, but rather, the average housing unit produces only 0.5 of a school-aged child.

Thibeault's analysis also revealed that the type of housing most frequently permitted for construction in New Hampshire—large single family detached units with three or more bedrooms—has significantly higher school enrollment per unit than rental apartments, multi-family housing, and small starter homes. Single family homes generate 0.6 students on average, while larger apartment buildings, those having 5 or more apartments, house only 0.2 students per unit. Similarly, the number of students per housing unit goes up with the number of bedrooms. Homes with four or more bedrooms generate one student on average; the state's one-bedroom housing units rarely have a school-age child living in them.

Finally, the study also found that state's newest housing stock is more likely to generate students. Housing units that were built between 1995 and 2000 housed an average of 0.7 students, with new single family homes generating slightly more (0.75 students per unit). Newly built four-bedroom units generated the highest number of students across all housing types in the state, an average of 1.3 students per housing unit, still less than the two-child rule of thumb.

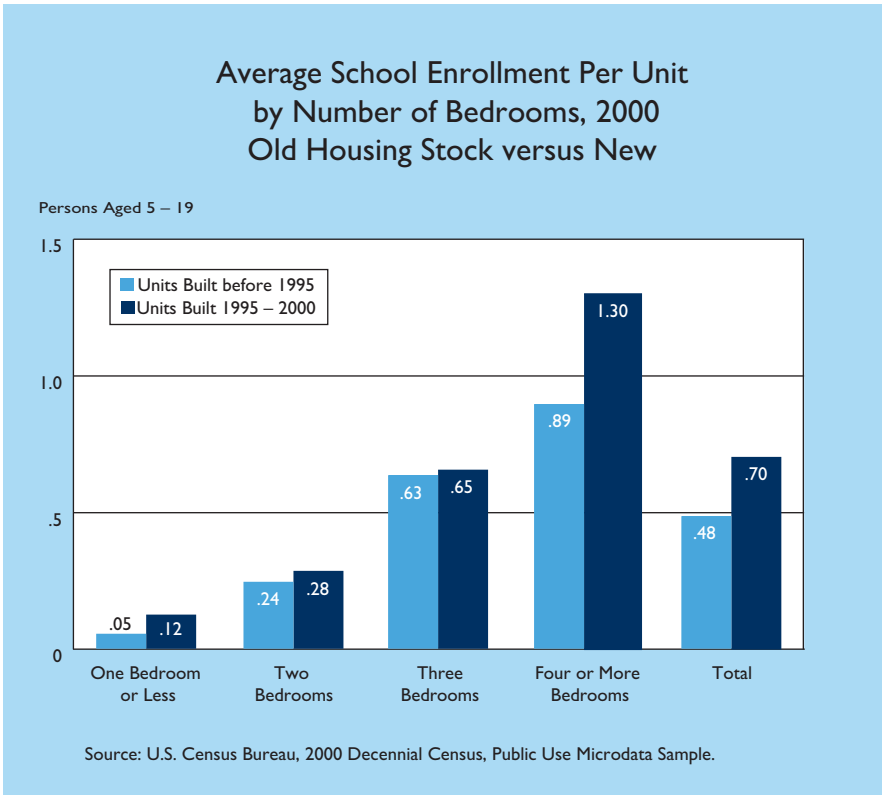
Average School Enrollment Per Unit by Number of Bedrooms, 2000 Rural versus Urban



Source: U.S. Census Bureau, 2000 Decennial Census, Public Use Microdata Sample.

Myth 3
"Rural areas are different—we always get more students."

When hearing statewide statistics, there is a tendency for people in rural municipalities to claim, "The numbers are not true for our town." In many cases, they are right. The economic conditions, development patterns, public facilities, and population densities are vastly different between the rural



Source: U.S. Census Bureau, 2000 Decennial Census, Public Use Microdata Sample.

north and the urbanized south. However, when Applied Economic Research analyzed New Hampshire's housing and enrollment data by geographic region, little difference was found between the state's urban and rural areas.

Decisions without the Myths

Applying the new enrollment-per-unit numbers to the simple impact calculation used before makes it clear that housing development is not as big a drain on municipal budgets as commonly thought. Once the actual number of students generated by the average single family home, 0.7, is replaced for the mythical two students, the property tax revenues from new housing are enough to cancel out the costs of education (See the table on page 7.) Importantly, these estimates are simple back-of-the-envelope calculations. They by no means capture all of the factors related to the fiscal impact of new housing on a community—factors that will vary widely from municipality to municipality, project to project, and even over time. However, the results of Thibeault's analysis do suggest that in the state overall, new residential development is not as costly as the public and many planning boards believe.

The argument that new development escalates school costs and ratchets up property tax bills has been one of the clarion calls of those opposed to new housing and affordable rental housing. By calling this claim into question, NHHFA hopes that the analysis by Applied Economic Research will encourage localities to make decisions about housing projects that are based more on reality and less on common mythology.

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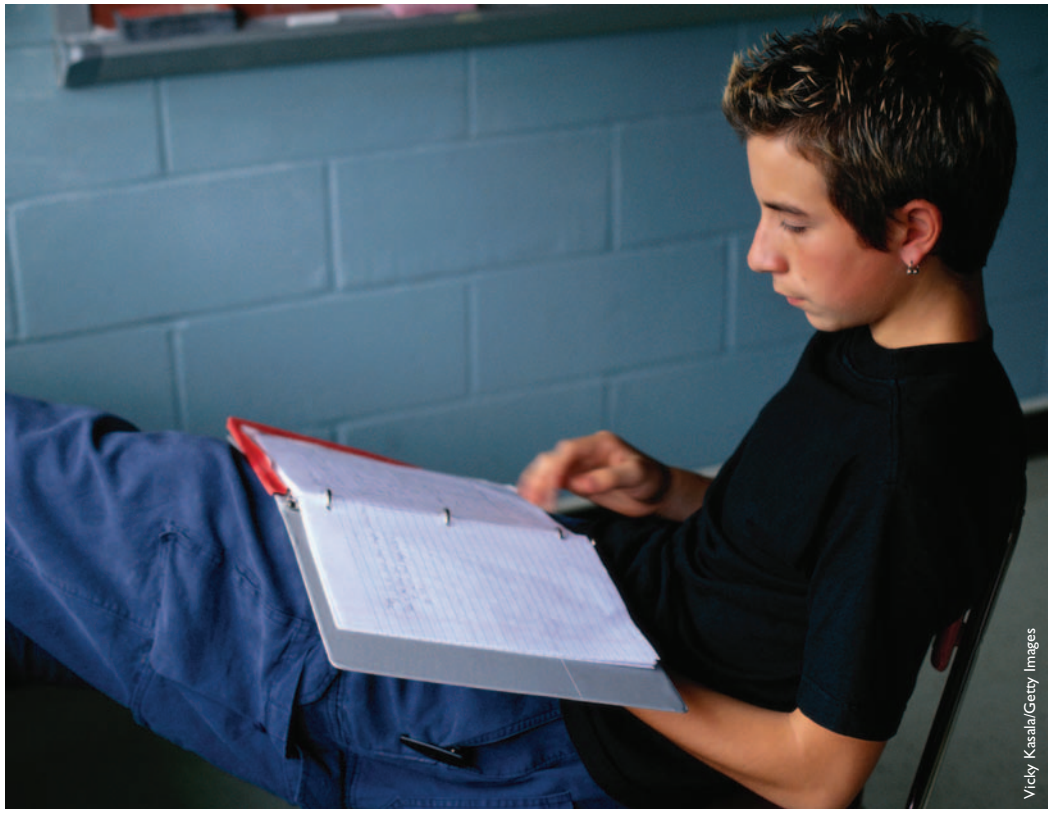
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