and Lleras-Muney point out, “an almost linear negative correlation between level of education and health outcomes, although there are multiple reasons for these associations between level of education and health outcomes, although it is likely that they are in part the result of differences in

opportunities and earning potential. Education also provides knowledge and life skills that allow better-educated persons to more readily gain access to information and resources that promote health [9]. Individuals 25 years of age or older who have an additional 4 years of education also report more positive health behaviors [5]. Cutler and Lleras-Muney note that having an additional 4 years of education reduces the risk that one will smoke from 23% to 12%. People with the additional education also are less likely to report excessive drinking (5 or more drinks in 1 day). Those with more education report drinking to excess 4 days per year on average, compared with 11 days per year for those with less education. The risk of obesity is also reduced for those with more education, from 23% to 18%, and they are at slightly less risk of using illegal drugs (4.9% versus 5.0%) [5]. The authors note that differences in health behaviors alone cannot explain all of the disparities in health outcomes between the better educated and the less educated. Nevertheless, Cutler and Lleras-Muney point out, “an almost linear negative relationship exists between mortality and years of schooling and between self-reported fair/poor health status and years of schooling” [5]. And for some outcomes (functional limitations and obesity, for instance) the positive impact of education is even greater for those with some postsecondary education [5].

The correlation between educational achievement and health declines after a person reaches about age 50 or 60 [5, 10]. Cutler and Lleras-Muney suggest several possible reasons for this [5, 10]. Although less educated people are less likely to survive into older age, those who do survive are relatively healthy. Therefore, they may have been more similar to those who are better educated. It is also possible that education has become more important to health outcomes only in recent years. Further, the association between education and health may decrease after adults retire.

There are multiple reasons for these associations between level of education and health outcomes, although it is likely that they are in part the result of differences in

Personalization to the Highest Power
Colleen C. Pegram

SandeHoke Early College High School (SHECHS), nestled between a turkey plant and a hatchery off Highway 401 Business in Raeford, North Carolina, is 1 of 2 high schools in Hoke County. SHECHS is innovatively designed, and the other school is traditionally designed, but both have the same mission: that every student graduate from high school ready for college or a career in a globally competitive world and prepared for life in the 21st century. Both schools have high expectations of faculty to ensure that this educational mission is achieved, and both expect students to be active participants in their education.

There are distinct physical differences between the 2 schools. The traditional high school is sprawled across 2 city blocks and is attended by nearly 2,000 students, whereas SHECHS occupies only 1 of 3 buildings on a satellite campus of Sandhills Community College; students must apply for entrance, and total freshman enrollment each year is limited to 75 students. The total SHECHS enrollment in the 2012-2013 school year is 256 students. (Freshman enrollment originally was limited to 55 students and increased over time to the present limit of 75 students). Required high school classes are taught in 1 building, housing 9 classrooms, and students also take some college classes on the main Sandhills campus. The small satellite campus, small number of students, and small staff facilitate increased personalization—the tailoring of teaching methods, curriculum, and learning environment to meet the needs of individual learners.

State Superintendent of Public Schools June Atkinson has identified instructional improvement as one of the comprehensive strategies for remodeling public education in North Carolina in order to move the state forward.

The North Carolina New Schools Project has identified personalization as 1 of 6 design principles that are essential for school success. SHECHS is using personalization as a launching pad to achieve its vision and accomplish its mission.

SHECHS recruits students whose caretakers, parents, or guardians have not earned a 2-year or 4-year college degree, and for the past 4 years such students have made up 77% of the freshman class at SHECHS on average. These students have been targeted with an eye to increasing their chances of graduating from high school and college. In the Early College program—a 5-year program that begins in 9th grade and includes a second senior year—students are given the opportunity to earn a 2-year college degree free of charge while they are earning their high school diploma.

To persuade SHECHS students that they can go to college and be successful, staff members must connect with them in ways that go beyond textbooks, test scores, and grades. Purposeful personalization is the best way to reach students. Staff members must be innovative in developing and sustaining positive relationships with students by providing them with effective academic support, using a variety of strategies for increasing students’ academic success.

An intervention professional learning community has been set up at SCHECH, and the school’s teachers and counselors participate in its monthly meetings, where the focus is on finding effective academic interventions for students needing additional help. The professional learning community looks for early warning signs that a student may not succeed, and as a team, the teachers and

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behavior across education groups. The relationships that have been found between level of education and various health risk factors—smoking, drinking, diet/exercise, use of illegal drugs, household safety, use of preventive medical care, and care for hypertension and diabetes—suggest very strongly that people who are better educated have healthier behaviors, although some of these healthier behaviors may also reflect differential access to care. As we have mentioned, those with more years of schooling are less likely to smoke, to drink heavily, to be overweight or obese, or to use illegal drugs [5]. Interestingly, although they report having tried illegal drugs more frequently than do the less educated, they also report having given up using illegal drugs more readily [9, 10].

The effect of level of education on health seems to be the same for both men and women across most outcomes; depression is one of the few exceptions [5]. It is not known whether such exceptions are the result of biological sex differences, or of differences in the behavior of men and women. The effect of level of education on health also appears to the same for both whites and blacks, again with a few exceptions. Whites tend to experience more positive health benefits from educational advancement in reported health status; they are less likely to report being in fair or poor health than are blacks with the same level of education. Cutler and Lleras-Muney also found that the impact of additional years of education was greater for those not living in poverty than for those who were poor [5]. This highlights the interrelationships among those variables considered to be social determinants. Educational attainment alone is not an independent driving factor for improved health status. An individual with a 4-year college degree who is living in poverty might have considerably worse health than an individual with such a degree who is well off financially.

Many of the social factors that affect health have both independent and interactive effects. For example, people with higher incomes are more likely to live in safe, healthy

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