Two months ago we announced a gift, the largest ever to Rice, from alumni John ’73 and Ann Doerr ’75 to establish a new institute at Rice to develop the leadership capacities of our students. One of the most common questions I have been asked since then has been, “Can you teach leadership?” Or take the flip question, “Can you learn leadership?” The answer that underlies the new Doerr Institute for New Leaders is an emphatic “Yes.”

That is not to say that some people are not born with more of certain leadership aptitudes. To take a different context, we have recently learned that a number of diseases have both environmental and genetic components. Likewise, some of our skills and habits may also have a genetic component, but the manifestation of those attributes will be greatly affected by both learning and practice. There is increasing evidence, for example, that genetics plays a role in determining whether we are introverts or extroverts. And while extroverts may naturally come by some leadership skills or attributes, many great leaders and public personalities have actually been introverts.

I wrote earlier this year about some of the changes occurring in higher education, and what our students now expect from their colleges and universities. Much more important than changes in technology are changes in the view of what can actually be taught and learned. I saw this first in the evolution of law schools. It used to be thought that some lawyering skills one “came by naturally” or could only be learned “on the job.” A good example was negotiation. But that view changed, and sophisticated programs to teach students negotiation emerged. This was closely related to an increasingly sophisticated analysis of the negotiation process by researchers and scholars.

Much has historically been excluded from the formal domain of higher education because it was thought of either as innate or as something that could only be learned through practical experience gained after completing formal education. The expanding notion of what we both can and should teach university-level students demands not only that we create programs to do so, but that we find ways to measure our success and to assess the effectiveness of such programs.

Another central example of a “can we teach that?” topic is creativity and its close cousin, innovation. A great deal of ink has been spilt on the subjects of creativity and innovation, and the difference between them, but innovation can be thought of as the execution of the results of creativity, namely new ideas and ways of looking at things. Without creativity, you get no innovation.

This is one of the reasons Rice and other universities take a liberal arts approach to a college education, emphasizing a broad education and the importance of the humanities. We urge a solid foundation in art, literature and other areas, in part, because we believe the study of those areas helps develop creative capacities and habits.

This importance of education for creativity and innovation was reflected at Rice in the decision to build the Oshman Engineering Design Kitchen (OEDK), which provides students the space, materials and instructional resources to foster creativity and enable innovative solutions to problems. This was an immediate hit not only with engineering students, but also other students who became part of interdisciplinary teams. Indeed, one of the educational goals served by the work taking place in the OEDK is the learning of effective teamwork.

This kind of learning was quickly determined to be both very effective and exciting for students. The result was demands to make it more available in the engineering context, while adapting and applying the concept to other areas. The new Moody Center for the Arts, scheduled to open next spring, will include a space that is an arts analogue to the OEDK. And we are now exploring the design kitchen concept for biosciences and social sciences.

Leadership, creativity, innovation and teamwork. Yes, we can teach that, and we must if our students, whatever their chosen endeavors, are to realize their full potential.