Regent's Talk, Aug 17, 2006 Steven G. Craig

This has been a busy summer at UH, and we the faculty thank you for your continuing efforts to improve the University in so many dimensions. I recently had occasion to say to one of you, why don't you re-up when your term is done? And the answer was, although not literally, are you kidding, its way too much work! This is a symptom, I think, that not only is UH a complicated University, but its an ambitious one. And of course ambition is the root of all trouble, because it takes real effort to improve any institution, and you have been putting in the effort.

I have been urging you to continue your terrific efforts to improve the research standing of the University. I've spoken in the past of the need for about 400 new faculty, without any new students. And the faculty appreciates that part of the tuition increase this year is to obtain the first 30 of those faculty, and we appreciate your willingness to embark on this path. The financial implication of pursuing research excellence on this campus, however, may have been somewhat buried in my remarks last time. To achieve our objectives in research would require that in-state tuition about double in real terms compared to what is is today. Let me say I am gratified that you all have striven to keep tuition at UH low. At the same time, however, I think a reasonable question is why would any student pay double for their education at a first rate research university, if they could obtain that same education from a bargain priced teaching university.

It appears, however, that the bargain is at the first rate research university with the higher costs. Now let me talk about why. The first sign is a market signal. Competition to get into excellent research universities, despite their much higher tuition costs, is much more intense than at teaching institutions. Clearly, then, students want the education that can be obtained at the serious

research universities. Nonetheless, the fundamental reasons for the much higher demand are worth examining in detail.

The basic difference between teaching and research universities is creativity. While a student can take a wide variety of subject courses at a teaching university, there are no courses in creativity and entrepreneurship. Even if a person at a teaching institution manages to keep abreast of the field as it changes from when the terminal degree was obtained, faculty at teaching universities are not using the knowledge they are trying to impart.

Research universities, on the other hand, create an entire culture of innovation and change. Research is the search to learn something we do not already know. The usual process to answer these questions is a novel, or creative, way to apply the knowledge that already exists. It is the novel application of knowledge that distinguishes research universities. Thus one of the central key inputs into creating a first rate research university is to create an atmosphere of learning and creativity. That is, research universities create an environment where people get stimulated to develop a new way of applying the world's knowledge. When students interact with people in the classroom who are creating knowledge, they are also implicitly learning about how that knowledge is created. It is in this way that research universities teach creativity and problem solving, which is the key input for a student to be successful after college.

Let me give an example from my own teaching. My area of expertise is state and local government economic behavior. We don't even have a course on this subject at the undergraduate level. But in my undergraduate class on general public sector economics, I often talk to my class about my current research. How can you tell, I ask my class, whether a local city government is wasting taxpayers' money? Its actually a difficult question, and I have published academic papers

on the topic. If you answer just see if the government pays too much for paper clips, you may have a problem with seeing the forest because of all the individual trees. My academic work on the answer involves no new theory, nor new statistics, but a new application of theory and statistics. The point is that we, human beings, do not know the answer to all of the interesting questions in the world. In fact, I keep learning that we know the answer to very few of the world's questions- like even how many planets there are! Yet, despite that we don't know the exact answer, everyday life, and everyday business, requires that we use the best answer we can. We don't have to score 100 in business, you just have to score a little improvement over the current environment.

It is this creative environment that we are striving to create on this campus at UH. An atmosphere where literally lifelong learners, aka faculty, are stimulated to expand what we know into new arenas. This atmosphere is a combination of faculty, graduate students, and undergraduate students.

Thus to improve its research standing, UH needs to grow its faculty. UH also needs to continue to recognize that its graduate programs are a core component of the research environment, both as an input into research and teaching, and as an output, or resource, for the business and academic community. Finally, UH needs to focus on building an environment for undergraduate education consistent with the research mission. This environment is best served by full time students who are striving to learn creative problem solving skills. This last step is very important. We need to develop a bigger and stronger base of residential, full time students. And we need to continue to get our message out that the University of Houston is an excellent place to pursue an education in a major research environment. So lets not get too distracted over whether or not we teach more students in more places, but work on providing students in Houston with the opportunity

to obtain a first rate education that will expand not only their knowledge base, but their ability to think creatively and channel their entrepreneurial spirit into making Houston a better place to live for everyone.