

TO: Don Coers
FROM: Grady Price Blount
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re: Collaboration Potential in the Sciences

Potential collaborations between Texas Tech University (TTU) and ASU's College of Sciences are profound. The overall level of ASU faculty willingness to collaborate is high. Almost everyone I have spoken with is genuinely excited about the possibilities. The specific concerns, such as they exist, mostly revolve around faculty and staff confusion about what the system transition actually means. A common misunderstanding is to equate the Texas Tech University System with Texas Tech University in Lubbock. There is a widespread misapprehension that ASU is somehow being swallowed by the Lubbock campus. While erroneous, this misconception is causing some hesitation about collaborative efforts. The use of terms such as "feeder" or "overflow campus" needs to be addressed up front.

My personal experience, based on CCSU joining the Texas A&M System in the last decade, is that the Texas Tech name identification and affiliation will be a huge boost to ASU's reputation, enrollment and overall cachet; but only if everyone (on both campuses) recognizes that this is a marriage of peers. Collaboration should be based on the best of what each campus has to offer. The first and most immediate target is faculty involvement (e.g. see <http://www.star-telegram.com/business/story/177070.html>). As the programmatic comments below illustrate, ASSU faculty are ready to open such discussions on several fronts.

There are two obvious pluses to this situation for our students: 1) the recognizable distinction of a degree from a well-known (i.e. *brand*) institution, and 2) the possibility for *pipeline programs* or similar preferential early admission to TTU professional schools. This later is most critical for collaborative opportunities with all of our College of Science undergraduate programs. For example Biology to Medical School, Computer Science to Electrical Engineering, Physics to Mechanical Engineering, etc. The point to emphasize here is that ASU is acting as far more than a source of undergraduates, we are acting to actively empower young people who have never even thought about graduate school. This is a educational collaboration that could well change the face of the future for our region - *Touching Tomorrow* as we now say.

Agriculture: I believe that our new *Natural Resources Management* graduate degree is one of our highest potential growth areas. Faculty in our Department of Agriculture (Cody Scott and Cory Owens) have scheduled a meeting in October with their TTU counterparts (Dr. Ernest Fish, is head of the Department of Natural Resources at TTU). The purpose of the October meeting will be to investigate collaborative efforts between the two departments. In tightly correlated programs such as these it is not uncommon to see joint faculty appointments, particularly for graduate faculty. Since TTU has a Ph.D. program, this is also an obvious venue for collaborative student research projects bridging the gap between an undergraduate or graduate career here and an eventual Ph.D. in Lubbock. Folding *Geographic Information Science* (GIS) into our existing Agriculture degrees is an area of particularly high collaboration potential.

Biology: The potential for collaboration within the life sciences is profound. In addition to the possibility of collaborative research programs (e.g. partnership arrangements in extramural funding), Lubbock offers several post-baccalaureate programs and specialized training that would likely be of great interest to many of our students, particularly in Medical Technology, to develop internship agreements. Many of our graduates currently pursue post-baccalaureate education in Biomedical Sciences. It would likely be a very attractive program if we were able to develop a 3+2 degree plan that would allow students to spend three years at ASU and then transfer to TTU for two years of graduate school and complete a M.S. in Biomedical Sciences (a degree which does not currently exist at ASU). At the minimum we could certainly make efforts to align our curriculum with the requirements for the program in Biomedical Sciences so that we could better prepare students to pursue a career in this field. As noted elsewhere, partnerships with the TTU medical schools offering preferred or early admission to ASU graduates would greatly enhance our recruiting efforts.

Chemistry: Dual degree programs have been identified as an option for collaboration between Chemistry here and Chemical Engineering at Lubbock. These programs could take at least two forms: (1) a 3+2 program leading to a B.S. degree in chemistry from ASU and a simultaneous B.S. degree in Chemical Engineering from TTU, and (2) a program in which a student completes a B.S. in chemistry from ASU, then moves directly into a master's program in Chemical Engineering at Tech. This second option might be the more popular option since it has the advantage of allowing a student to receive maximum support from ASU's SAS program.

Computer Science: The CS program is currently in a high-potential/low-achievement scenario. I propose that we address this situation by adding a strategic emphasis area in Geographic Information Science. This burgeoning field would grow the CS program and also support initiatives in Business and the Sciences. In addition, CS faculty member Jim Jones has existing collaborations with peer faculty in Lubbock (his dissertation advisor is now at TT) and the *Center for Advanced Intelligent Systems*, <http://www.cs.ttu.edu/%7Ecais/>.

Geographic Information Science (http://gis.ttu.edu/center/department_links.php) is ubiquitous on the Lubbock campus and several of these programs would dovetail nicely with strategic growth plans for our *Natural Resources Management* degree in Agriculture as well as a new emphasis area for Computer Science described above. As a proviso, I must point out that GIS is a capability; not necessarily a program of study. GIS today is roughly equivalent to where Computer Science was in the early/mid 1960s. Nevertheless, the applications capabilities it brings to the table are tremendous.

Nursing and Physical Therapy: As detailed in previous memos, the health sciences at ASU are growing rapidly. Nursing and Physical Therapy also constitute an academic core with a unique and highly specific mission. As such, I have recommended previously that we explore the possibility of splitting them off into a separate academic unit. With the Texas Tech System affiliation, an obvious avenue for exploration is forming a Health Science Center (HSC) at San Angelo. Although the prestige and higher formula funding afforded to HSCs is attractive, it is not clear if such a change would sever the ties of the Nursing and Physical Therapy programs to ASU; something the faculty do not want to see.