

MINUTES OF THE
HIGHER EDUCATION APPROPRIATIONS SUBCOMMITTEE
WEDNESDAY, JANUARY 26, 2005, 2:00 P.M.
Room W020, West Office Building, State Capitol Complex

Members Present: Sen. Greg Bell, Co-Chair
Rep. Kory M. Holdaway, Co-Chair
Sen. Peter Knudson
Sen. Dan Eastman
Sen. Carlene Walker
Sen. Ron Allen
Rep. Sheryl Allen
Rep. David Clark
Rep. Bradley Daw
Rep. Margaret Dayton
Rep. Gregory H. Hughes
Rep. Susan Lawrence
Rep. Scott L. Wyatt
Rep. Patricia W. Jones
Rep. Carol Spackman Moss
Rep. LaWanna "Lou" Shurtliff

Staff Present: Boyd A. Garriott, Senior Legislative Fiscal Analyst
Debra Headden, Legislative Fiscal Analyst
Rolayne Day, Secretary

Public Speakers Present: Commissioner Richard Kendell
John Sutherland, VP Engineering & TIAB
John Hill, VP Human Resources & L-3 Communications
Mark Vandermeiden, Director of Engineering, ATK Thiokol
Ragula Bhaskar, CEO, Fatpipe Networks
Hope Eccles, Governor's Dir. of Ed. for Higher Education
Mark Spencer, Associate Commissioner, USHE
Dr. David Pershing, VP for Academic Affairs, UU
Pres. Michael Young, UU
Pres. Stan Albrecht, USU
Dr. Brent Miller, VP for Research, USU
Dr. Lorris Betz, Sr. VP for Health Sciences, UU
Lane Beattie, Pres. Salt Lake Chamber of Commerce
Luke Callister, Salt Lake Chamber of Commerce
Steven Mecham, Callister Nebeker & McCullough
Pres. Darrell White, UCAT
Rep. Brent Goodfellow
Sarah George, Ex. Dir. Utah Museum of Natural History
Collette Mecier, VP Instruction, OWATC
Ron Kusina, Ex. Dir., Weber Economic Development Council
Jared Haines, Interim VP Instruction and Student Services, UCAT
Mike Bouwhuis, DATC Campus President

A list of visitors and a copy of handouts are filed with the committee minutes.

Committee Co-Chair Bell called the meeting to order at 2:02 p.m.

1. Engineering Initiative—Analyst Boyd Garriott discussed the Engineering Initiative (Budget Book, Tab 3, Issue Brief 6). The objective of the Engineering and Computer Science Initiative is to double the number of graduates by 2006 and triple the graduates by 2009. Institutions have matched State appropriated funding (\$4 million) with \$4.7 million for a total of over \$8.7 million. If one-time funding is added, the total is well over \$12 million. The number of graduates has increased 35.8%. An error in the Issue Brief was corrected—the Analysts recommend a total of \$2

million from the General Fund for FY 2006 consisting of \$1 million in ongoing funds and \$1 million in one-time funds.

John Sutherland, Technology Initiative Advisory Board, said the Board is voluntary and is an industry oversight committee that makes suggestion to the Regents and tracks where money is spent. Board members in attendance introduced themselves. Mr. Sutherland said the Board represents a true partnership between business/industry and higher education. He discussed a handout showing that there were approximately 600 more engineering graduates in 2004 than in 2000, and about 80% of them stay in Utah. Assuming an average potential income, these graduates will pay over \$2 million in taxes this year and that more than pays back the State's investment. Statistics show that 80% of the UU's graduates are employed in engineering fields and 20% are in graduate school. Demand shouldn't end soon and there is still room for growth in some of the engineering programs.

Representatives from business and industry discussed the need for engineering graduates including John Hill, VP of Human Resources, L-3 Communications; Mark Vandermeiden, VP of Engineering, ETK Thiokol; and Ragula Baskar, CEO, Fatpipe Networks. Mr. Baskar noted that when engineering positions are created, five to ten other jobs are added downstream.

Comments and discussion were heard from Subcommittee members and Mr. Sutherland.

Sen. Bell welcomed Nolan Karas, Chair, Board of Regents, and Hope Eccles, Governor's Director of Education for Higher Education, who spoke briefly.

Engineering Loan Forgiveness Program—Mr. Garriott said the Legislature established a student loan program as part of the Engineering and Computer Science Initiative to enable students with financial needs to study in high tech fields (Tab 3, Issue Brief 14). Students can be reimbursed for tuition after graduation, one year for each year they stay in Utah. The Analyst recommends continuation of the \$50,000 base funding for FY 2006.

Following a question from Rep. Holdaway, Mr. Garriott directed the Subcommittee to the beginning of Tab 4 that gives a summary of the higher education priorities from the Analyst's Office.

MOTION: Rep. Daw moved to adopt minutes of the January 24, 2005, meeting.

The motion passed unanimously with Sen. Knudson and Reps. Clark and Hughes absent for the vote.

Mr. Garriott explained that priority items listed under Tab 4 are not actually prioritized because his office feels that is the Legislature's job; it is just a list. Mark Spencer, Associate Commissioner, USHE, clarified that no engineering graduates have been awarded loan forgiveness for tuition for more than a three-year load. This is largely because students have to be accepted into engineering programs after general education courses have been completed.

MOTION: Rep. Allen moved to approve \$1 million in ongoing funding and \$1 million one-time funding for the Engineering and Computer Science Initiative.

The motion passed unanimously with Sen. Knudson and Rep. Hughes absent for the vote.

MOTION: Rep. Moss moved to continue base funding of \$50,000 for the Engineering and Computer Science Initiative Student Loan Forgiveness Program.

The motion passed unanimously with Sen. Knudson and Rep. Hughes absent for the vote.

2. Reimbursed Overhead for Research and Development—UU Pres. Michael Young distributed handouts and said reimbursed overhead funds have been used to significantly grow research by allowing them to attract, retain, and equip high quality faculty in an extremely competitive environment. They have been able to double the capacity to secure those funds and produce world-class research that contributes to the economy. Every research dollar that is brought into the university puts \$1.50 into the economy. Dr. David Pershing, VP for Academic Affairs, said roughly 1/3 of the total grant/contract amount awarded is overhead and where the money is spent depends on the field of study. Equipment must already be in place or the government won't give a grant; startup costs are upwards of \$500,000 for beginning researchers and doubles for top researchers. The next biggest use of reimbursed overhead is faculty

retention, and the competition is fierce. Universities also have to remodel facilities, support programs, provide capital facilities, do compliance monitoring, support graduate students, provide information systems, etc.

Dr. Brent Miller, VP for Research, USU, discussed a handout showing the return on investment for reimbursed overhead. Funds are used to recruit the very best faculty for startup packages, to retain outstanding faculty, to support students, and for undergraduate scholarships. The Space Dynamics Lab receives no State funding; it pays for all indirect costs with reimbursed overhead.

Dr. Lorris Betz, Sr. VP for Health Sciences, UU, said the new law allowing higher educational institutions to have a financial interest in spinoff companies cleared up some of the confusing areas that previously impeded their ability to fund spinoff enterprises. Pres. Young said the new law will also facilitate commercialization by reducing the up-front costs and expanding the funding mechanisms.

3. Economic Development—Salt Lake Chamber of Commerce Pres. Lane Beattie discussed an economic development initiative based on a model in Phoenix, Arizona. Research shows that strong economic areas are based around research institutions. Science and technology is what drives the economy of the world and Utah must compete globally.

Rep. Holdaway assumed the committee chair.

Mr. Beattie said science and technology come from the universities. The stimulation of thought patterns and entrepreneurial encouragement must continue to be a major focus. California, Michigan, Arizona, and Wisconsin, have all put major funding into research institutions because they see the vision. Utah's agriculture cannot build our economic stability as it once could; science, research and technology will. Utah's research institutions need to be strengthened.

Sen. Bell assumed the committee chair.

The UU and USU combined received \$500 million grants/contracts last year. World class scientists come to Utah because of what the institutions can offer, and right now they can't compete. Mr. Beattie said the Economic Development Initiative would take \$400 million, and they need Legislative support. He emphasized that it is an economic development issue, not a higher education issue.

Commissioner Kendell said the proposal is about building the research and development capacity of the State wherever it may be, some in the institutions and some in the private sector. Utah has the opportunity to be outstanding as one of the corridors that drives the economy. He emphasized that the Initiative is separate from what higher education has requested and should not be prioritized together.

Pres. Young said the proposal is enormously exciting and the presence of a research institution is the common thread that makes it work around the nation. Pres. Stan Albrecht, USU said changes in higher education in language, culture, reward systems, and accountability all come together in this Initiative. Pres. Young said it is also a teaching initiative that will launch people who will be both technological and entrepreneur oriented, and they must go hand and hand with research.

Dr. Betz said USU and the UU have a plan to educate a well-trained work force and to create new knowledge that results in commercialization. He discussed how research universities produce a strong return on investment. He noted that \$414 million in university contracts and grants in 2003 has now grown to \$500 million. These contracts and grants brought \$1.2 billion in new money into the state, 37,198 new jobs, \$97 million in state tax revenues, \$17 million in local tax revenues, and out of every \$1 of state funding, \$6 of non-state funding was produced (from the Bureau of Economic and Business Research: *The Economic Impact of Utah's Research Universities, 2004*).

Dr. Miller said the Initiative would invest in programs and facilities at the universities to expand activities in IT, biotechnology, and high technology. It would also create Technology Innovation Centers to share best practices statewide. Dr. Miller discussed the 25 research clusters, the focus of each, and where they would be located throughout Utah. The total investment over five years would be programmatic at \$125 million, campus facilities at \$250 million, and the Technology Innovation Centers at \$25 million for a total of \$400 million. Dr. Miller discussed

the return on investment based on current data for the two research universities and expectations based on the history of spinning off companies.

Steven Mecham, Callister Nebeker & McCullough, distributed a white paper and reviewed what other states and institutions have done around the country (Appendix 2). He said the Legislature needs to take action now; revenue bond interest rates average just over 4%. He will make himself available as the session goes on for questions. Sen. Bell said surrounding states have already bonded and passed sales tax increases to set up research clusters.

Mr. Beattie said the Initiative could use revenue bonding, and that does not impact the state bonding level. There is a substantial amount of new money required to get the scientists. Economics is the answer to public education needs and other needs in the State. Sen. Bell will carry a bill to get the Initiative going. Mr. Beattie said the proposal will also be given for the Capital Facilities and the Economic Development Subcommittees.

Rep. Brent Goodfellow, and representing SLCC, demonstrated video-relay technology developed by Sorenson Media that allows people from the deaf community to communicate. SLCC's American Sign Language Interpreting Program currently graduates 12-15 students a year; 300 to 400 are needed. Higher education, public education, and state agencies are required by law to provide interpreters. SLCC wants to expand and develop the program in a compressed format with 4 to 5 hours a day plus time at the Deaf Center so students can graduate in a year; the goal is to train 100 a year. Rep. Goodfellow asked for support of his bill that will allow some of the \$.10 service charge on telephones to be used for this training.

Jared Haines, Interim VP for Instruction and Student Services, said UCAT is structured to take on a central economic development role. Small businesses are critical to economic development. For every engineer, there are approximately 15 trained technicians for support. The main stumbling block for business growth is the lack of an available work force. UCAT can provide those trained workers in a timely manner. DATC Campus President Mike Bouwhuis said that the economy has taken off very quickly in some areas; there is a very high demand for machinists and for workers at HAFB (65% are eligible for retirement in the next few years). A handout was distributed showing the statistics and a list of the hottest jobs in each ATC area.

Collette Mecier, VP for Instruction, Ogden-Weber ATC, discussed the need in manufacturing for machinists. Ron Kusina, Executive Director, Weber Economic Development Council, said the Council's short-term goal is to bring 100 skilled machinists to Utah to fill needs. The long-term strategy is to use the incredibly good program at the OWATC to build the number of machinists. The summary page of the handout shows that an additional 1,300 jobs would be expected with a \$2.8 million investment.

4. Range Creek—Rep. Allen said \$200,000 was funded last year for Range Creek because of the archeological treasures, but was reduced by \$50,000 in a special session because of budget reductions. Sarah George, Executive Director, Utah Museum of Natural History, discussed a handout showing interest around the world as well as the scientific value. They have put security measures in place to protect the area. It is wholly pristine, un-looted, and untouched. The canyon is now owned by the Division of Wildlife Resources. The request is to restore the \$50,000 that would be used to significantly expand the number of people doing research in the canyon and to get the job done quicker.

Mr. Garriott said a briefing on the move of art treasures at the University of Utah to the New Museum of Fine Arts will be held at 5:30 p.m. on Thursday. All who wish to attend must RSVP to Mr. Garriott.

MOTION: Rep. Daw to adjourn.

Committee Co-Chair Bell adjourned the meeting at 5:03 p.m.

Minutes were reported by Rolayne Day, Secretary.